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FILE COVERS 1907 - 18 Jul 2008 VOL 149 ISS 4
FILE LAST UPDATED: 17 Jul 2008 (20080717/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=>

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L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 17:11:54 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 90 TO ITERATE

100.0% PROCESSED 90 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

L3 0 L2

=>

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10/923,271

L4 STRUCTURE UPLOADED

=> d

L4 HAS NO ANSWERS

L4 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l4 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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FULL SCREEN SEARCH COMPLETED - 314 TO ITERATE

100.0% PROCESSED 314 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

L5 0 SEA SSS FUL L4

L6 0 L5

=> d

L6 HAS NO ANSWERS

L4 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L5 0 SEA FILE=REGISTRY SSS FUL L4

L6 0 SEA FILE=CAPLUS L5

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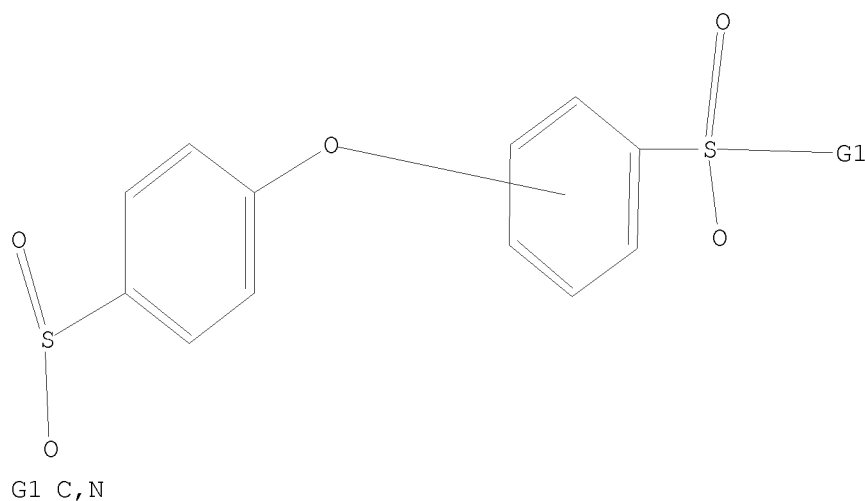
L7 STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7 STR

10/923,271



Structure attributes must be viewed using STN Express query preparation.

=> s 17 full

REGISTRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...

Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

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100.0% PROCESSED 36981 ITERATIONS
SEARCH TIME: 00.00.01

207 ANSWERS

L8 207 SEA SSS FUL L7

L9 991 L8

=> s 19 and py<2001

20984862 PY<2001

L10 673 L9 AND PY<2001

=> s 110 and hydroxamic acid

7600 HYDROXAMIC

4629129 ACID

5334 HYDROXAMIC ACID

(HYDROXAMIC(W)ACID)

L11 1 L10 AND HYDROXAMIC ACID

=> d ibib abs hitstr

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:28085 CAPLUS

DOCUMENT NUMBER: 130:99961

TITLE: Multicomponent enzyme system for treating wastewaters especially from processing wood, pulp, and paper and for organic syntheses and coal liquefaction.

INVENTOR(S): Call, Hans-Peter

PATENT ASSIGNEE(S): Call, Krimhild, Germany

SOURCE: Ger. Offen., 54 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19726241	A1	19981224	DE 1997-19726241	19970620 <--
WO 9901607	A2	19990114	WO 1998-DE1694	19980619 <--
WO 9901607	A3	19990624		

W: BR, CA, FI, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: DE 1997-19726241 A 19970620

OTHER SOURCE(S): MARPAT 130:99961

AB The multicomponent system containing oxidoreductases comprises (a) ≥ 1 oxidation catalyst; (b) ≥ 1 oxidant; (c) a mediator selected from among hydroxyl amines, hydroxyl amine derivs., hydroxamic acids, hydroxamic acid derivs. or aliphatic, aromatic, cycloaliph., heterocyclic, or aromatic compds. having at least one N-hydroxy, oxime, N-oxy-, or N,N'-dioxy function; (d) ≥ 1 mediator chosen from amides such as hydrazides or 1,2,4-triazolidine-3,5-dione; (e) ≥ 1 mediator chosen from imides such as hydantoin; (f) ≥ 1 mediator chosen from oxocarbons; (g) ≥ 1 co-mediator chosen from arylsubstituted alcs., carbonyl compds., aliphatic ethers, phenol ether, and/or olefins; (h) ≥ 1 co-mediator chosen from among the above-mentioned mediators and including radical anions; and (i) a small amount of a free amine of one of the mediators.

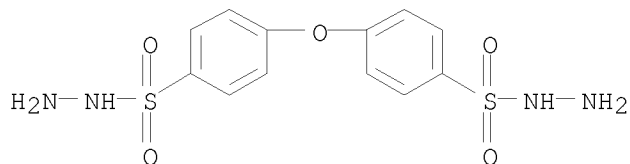
IT 80-51-3

RL: NUU (Other use, unclassified); USES (Uses)

(multicomponent enzyme system for treating wastewaters especially from processing wood, pulp, and paper and for organic syntheses and coal liquefaction.)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



10/923,271

=> s 110 and hydroxam?

11035 HYDROXAM?

L12 1 L10 AND HYDROXAM?

=> s 110 and hydrox?

1668346 HYDROX?

L13 84 L10 AND HYDROX?

=> s 110 and hydroxa?

11360 HYDROXA?

L14 1 L10 AND HYDROXA?

=> d 113 1-20 ibib abs hitstr

L13 ANSWER 1 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:371807 CAPLUS

DOCUMENT NUMBER: 136:342600

TITLE: Foaming agent composition

INVENTOR(S): Han, Sang Jin; Han, Tae Keun; Jo, Yong Yeun; Lee, Tae Kyung

PATENT ASSIGNEE(S): Dongjin Semichem Co., Ltd., S. Korea

SOURCE: Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7

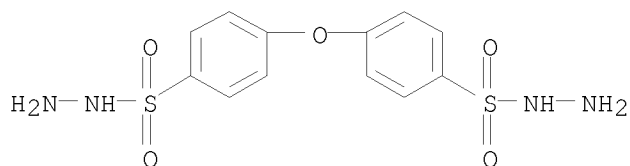
DOCUMENT TYPE: Patent

LANGUAGE: Korean

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KR 2000031781	A	20000605	KR 1998-48004	19981110 <--
PRIORITY APPLN. INFO.:			KR 1998-48004	19981110
AB	A foaming agent composition is provided which has an improved fluidity, load solidification characteristics and aging solidification characteristics. The preparation of the agent is as follow: 0.05-10 weight % of glycerin tri-12-hydroxy stearate (I) is dispersed in chemical foaming agent such as azodicarbonamide (II), p,p-oxybisbenzene sulfonyl hydrazide, benzene sulfonyl hydrazide, sodium bicarbonate or sodium carbonate. Thus, 100 weight parts of II and 0.5 weight part of I are mixed at room temperature, for 10 min			
in	the condition of 1,000 rpm to give the title foaming composition			
IT	80-51-3P, p,p'-Oxybis(benzenesulfohydrazide)			
	RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)			
	(preparation of foaming agent composition)			
RN	80-51-3 CAPLUS			
CN	Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)			



L13 ANSWER 2 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:889417 CAPLUS

DOCUMENT NUMBER: 134:30275

TITLE: Room-temperature expandable and curable resin compositions, adhesives, their cured products, composites, and adhesion method

INVENTOR(S): Soma, Hideya; Iwata, Kinpei; Hayashi, Hideki

PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000351819	A	20001219	JP 1999-164507	19990610 <--
JP 3768031	B2	20060419		

PRIORITY APPLN. INFO.: JP 1999-164507 19990610

AB The compns., useful as adhesives for metals, contain urethane-modified (meth)acrylates, sulfonylhydrazides, and decomposition promoters. Thus, a 1st agent comprising urethane acrylate (I; manufactured from IPDI, polybutylene glycol, and 2-hydroxyethyl acrylate) 5, Me methacrylate (II) 37, 2-hydroxyethyl methacrylate (III) 29, dicyclopentenxyloxyethyl methacrylate (IV) 29, 4,4'-bis(benzenesulfonylhydrazide) 0.5, cumene hydroperoxide 5, acrylonitrile-butadiene-methacrylic acid copolymer elastomer (V) 10, paraffin wax 0.5, and polymerization inhibitor 0.2 part was mixed with a 2nd agent comprising I 5, II 38, III 29, IV 29, V acetylacetonate 0.5, methacryloyloxyethyl acid phosphate 2, V 10, paraffin wax 0.5, and polymerization inhibitor 0.2 part to give an adhesive showing shrinkage on curing 13%, tensile shear adhesive strength (between Fe) 29.3 MPa, peeling strength 3.1 kN/m, and impact adhesive strength 12.9 kJ/m².

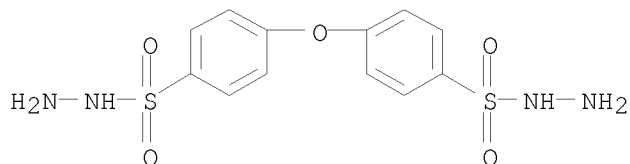
IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)

RL: NUU (Other use, unclassified); USES (Uses)

(blowing agent; room-temperature expandable and curable resin compns. for adhesives for metals)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

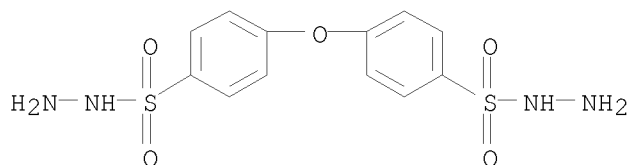


10/923,271

L13 ANSWER 3 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:388979 CAPLUS
DOCUMENT NUMBER: 133:31572
TITLE: High-foaming highly filled polyolefin resin
compositions and uses thereof
INVENTOR(S): Yoshida, Hiroshi; Okizaki, Akio
PATENT ASSIGNEE(S): Tosoh Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000159923	A	20000613	JP 1998-342741	19981202 <--
JP 4120075	B2	20080716		

PRIORITY APPLN. INFO.: JP 1998-342741 19981202
AB Resin compns. contain polyolefins 100, inorg. fillers 30-200, chemical blowing agents 1-15 parts (vs. polyolefins), and 0.2-3 parts alkyl (meth)acrylate homopolymers or copolymers containing >5 mol% alkyl (meth)acrylates having weight-average mol. weight 5000-100,000 per 100 parts inorg. fillers. Thus, a foam having expansion ratio 5.7 was prepared from EVA (Ultrathene 631), TiO₂ 10, Ca carbonate 50, azodicarbonamide 5.0, 4,4'-oxybis(benzenesulfonyl hydrazide) 1.0, Dianal BR 105 0.7 phr.
IT 80-51-3, 4,4'-Oxybis(benzenesulfonyl hydrazide)
RL: MOA (Modifier or additive use); USES (Uses)
(high-foaming highly filled polyolefin resin compns. and uses)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 4 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:300889 CAPLUS
DOCUMENT NUMBER: 132:322769
TITLE: Expandable polyolefin compositions containing high amounts of fillers and their uses
INVENTOR(S): Yoshimura, Kazunori; Okisaki, Akio; Yoshida, Hiroshi
PATENT ASSIGNEE(S): Toei Kasei K. K., Japan; Tosoh Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000129040	A	20000509	JP 1998-300205	19981021 <--
PRIORITY APPLN. INFO.:			JP 1998-300205	19981021

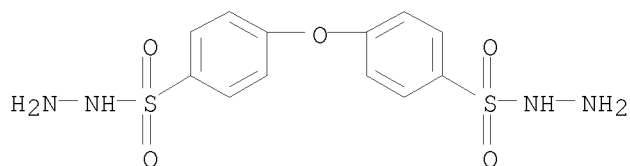
OTHER SOURCE(S): MARPAT 132:322769

AB The polyolefin compns. contain inorg. fillers, chemical blowing agents, and ≥ 1 additives selected from RXSO₃M and RXOSO₃M [R = (substituted) linear or branched aliphatic hydrocarbyl; X = direct bond, (substituted) aromatic divalent group; M = alkali metal]. The compns. provide cellular sheets, cellular raw fabrics, and cellular building interior materials made of the raw fabrics all with high expansion ratio. Thus, ethylene-vinyl acetate copolymer (Ultrathene 634) containing CaCO₃ 50, TiO₂ 10, azodicarbonamide 5, 4,4'-oxybis(benzenesulfonyl hydrazide) 1, Na dodecylbenzenesulfonate 0.7, and Zn stearate 3 phr was kneaded at 135° and rolled to give a sheet, which was laminated with a fire-resistant paper to give a raw fabric. Then, the fabric was blown in oven at 210° for 50 s to give a cellular raw fabric with expansion ratio 5.6 and good smooth surface.

IT 80-51-3, 4,4'-Oxybis(benzenesulfonyl hydrazide)
 RL: NUU (Other use, unclassified); USES (Uses)
 (expandable polyolefin compns. containing high amts. of fillers for cellular sheets, raw fabrics, and building interior materials)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 5 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:234242 CAPLUS

DOCUMENT NUMBER: 132:266148

TITLE: Flexible non-halogen-sheathed electric cable

INVENTOR(S): Ohani, Hirofumi

PATENT ASSIGNEE(S): Yazaki Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

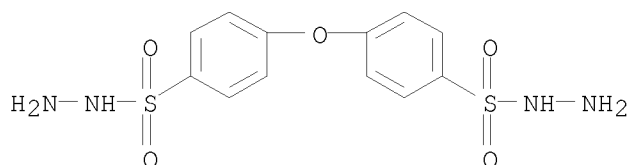
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000106041	A	20000411	JP 1998-275264	19980929 <--
JP 3778403	B2	20060524		

PRIORITY APPLN. INFO.: JP 1998-275264 19980929

AB The cable comprises (A) two strands of PVC or polyolefin-insulated

conductors or multiple strands of these insulated conductors with spacing fillings between the twisted strands and (B) nonhalogen fire-retardant sheaths which consist of polyolefin resins, fireproofing agents, and blowing agents thereon. A nonhalogen sheath consisted of LLDPE (NUCG 5651) 70, NUC6070 30, Mg(OH)₂ 100, and azodicarbonamide 1 part, showing tensile strength 12 MPa, hardness 87, and expansion ratio 12%.

IT 80-51-3, 4,4'-Oxybisbenzenesulfonyl hydrazide
 RL: NUU (Other use, unclassified); USES (Uses)
 (blowing agent; flexible non-halogen-sheathed elec. cable)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 6 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:59917 CAPLUS

DOCUMENT NUMBER: 132:130042

TITLE: Thermal printing material with excellent image durability

INVENTOR(S): Yanai, Koichi; Ohashi, Reiji; Nakano, Tomoyuki; Yoneshige, Masaki; Yoshioka, Hidetoshi

PATENT ASSIGNEE(S): Nihon Seishi K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

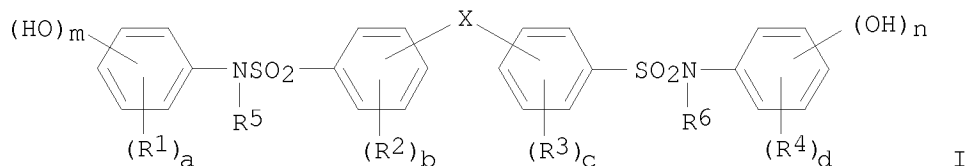
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000025341	A	20000125	JP 1998-191990	19980707 <--
PRIORITY APPLN. INFO.:			JP 1998-191990	19980707
OTHER SOURCE(S):	MARPAT	132:130042		

GI



AB In the title printing material comprising a heat-sensitive coloring layer comprised of a leuco dye and color developer, the color developer is a

sulfonamide compound represented by a general formula I (X = divalent group, single bond; R1, R4 = alkyl, alkoxy, halo, carboxyl, alkoxycarbonyl, carbamoyl; R2, R3 = alkyl, alkoxy, halo, hydroxy, carboxyl, alkoxycarbonyl; R5, R6 = H, alkyl; a, b, c, d = 0-4; m, n = 1-5). The thermal printing material produces images with excellent oil-resistance.

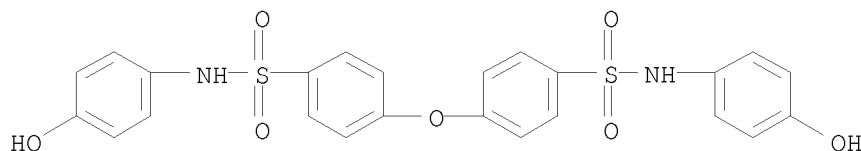
IT 51767-53-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(color developer in thermal printing material with excellent image durability)

RN 51767-53-4 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis[N-(4-hydroxyphenyl)- (CA INDEX NAME)



L13 ANSWER 7 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:683120 CAPLUS

DOCUMENT NUMBER: 131:287563

TITLE: Elastic cellular sealing materials with good water-shielding property and their manufacture

INVENTOR(S): Suzuki, Takuro

PATENT ASSIGNEE(S): Achilles Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11291375	A	19991026	JP 1998-119972	19980410 <--
PRIORITY APPLN. INFO.:			JP 1998-119972	19980410

AB Title sealing materials are manufactured by (1) applying solns. containing OH-terminated polydiene diols, compds. having isocyanate terminal groups activated by pyrolysis, and pyrolysis-type chemical blowing agents on releasing supports, (2) heating for curing and blowing, and (3) forming pressure-sensitive adhesive layers at least on one sides of the resulting elastic foams. Thus, a foam obtained from a composition containing Poly bd-R

45HT (OH-terminated polybutadiene rubber), oxybis(benzenesulfonyl hydrazide) (Unifoam AZ 90), and Trixene BI 7983 (blocked hexamethylene diisocyanate) showed d. 0.10 g/cm³, good water-shielding property, and high weather resistance.

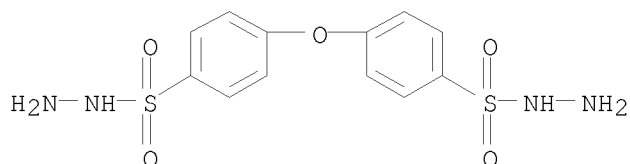
IT 80-51-3, Unifoam AZ 90

RL: NUU (Other use, unclassified); USES (Uses)
(Unifoam AZ 90, blowing agents; manufacture of elastic cellular sealing materials with good water-shielding property)

RN 80-51-3 CAPLUS

10/923,271

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 8 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:421222 CAPLUS

DOCUMENT NUMBER: 131:88825

TITLE: Acrylic polymer-based adhesive compositions, hardening body, and bonding procedure

INVENTOR(S): Sohma, Hideya; Iwata, Kinpei; Hayashi, Hidehi

PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11181360	A	19990706	JP 1997-348917	19971218 <--
JP 3534598	B2	20040607		

PRIORITY APPLN. INFO.: JP 1997-348917 19971218

AB The title comps., curable and foamable at room temperature, comprise acrylic polymers (e.g., dicyclopentenylxyethyl methacrylate-2-hydroxyethyl methacrylate-Me methacrylate copolymer), sulfonyl hydrazides [e.g., 4,4'-oxybis(benzene sulfonyl hydrazide)], decomposition accelerators (e.g., vanadyl acetylacetonate), and polymerization initiators (e.g., cumene hydroperoxide).

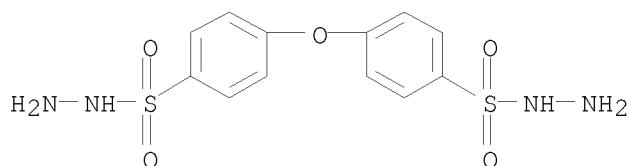
IT 80-51-3, 4,4'-Oxybis(benzene sulfonyl hydrazide)

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(acrylic polymer-based adhesive comps., hardening body, and bonding procedure)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 9 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:28085 CAPLUS
 DOCUMENT NUMBER: 130:99961
 TITLE: Multicomponent enzyme system for treating wastewaters especially from processing wood, pulp, and paper and for organic syntheses and coal liquefaction.
 INVENTOR(S): Call, Hans-Peter
 PATENT ASSIGNEE(S): Call, Krimhild, Germany
 SOURCE: Ger. Offen., 54 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19726241	A1	19981224	DE 1997-19726241	19970620 <--
WO 9901607	A2	19990114	WO 1998-DE1694	19980619 <--
WO 9901607	A3	19990624		

W: BR, CA, FI, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: DE 1997-19726241 A 19970620

OTHER SOURCE(S): MARPAT 130:99961

AB The multicomponent system containing oxidoreductases comprises (a) ≥ 1 oxidation catalyst; (b) ≥ 1 oxidant; (c) a mediator selected from among hydroxyl amines, hydroxyl amine derivs., hydroxamic acids, hydroxamic acid derivs. or aliphatic, aromatic, cycloaliph., heterocyclic, or aromatic compds. having at least one N-hydroxy, oxime, N-oxy-, or N,N'-dioxy function; (d) ≥ 1 mediator chosen from amides such as hydrazides or 1,2,4-triazolidine-3,5-dione; (e) ≥ 1 mediator chosen from imides such as hydantoin; (f) ≥ 1 mediator chosen from oxocarbons; (g) ≥ 1 co-mediator chosen from arylsubstituted alcs., carbonyl compds., aliphatic ethers, phenol ether, and/or olefins; (h) ≥ 1 co-mediator chosen from among the above-mentioned mediators and including radical anions; and (i) a small amount of a free amine of one of the mediators.

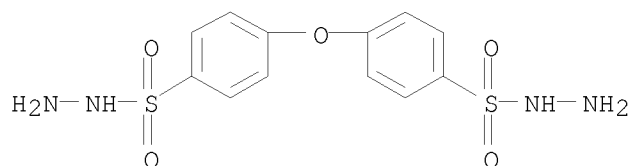
IT 80-51-3

RL: NUU (Other use, unclassified); USES (Uses)

(multicomponent enzyme system for treating wastewaters especially from processing wood, pulp, and paper and for organic syntheses and coal liquefaction.)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

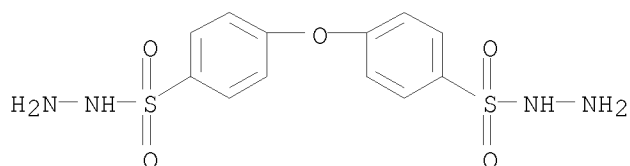


10/923,271

ACCESSION NUMBER: 1998:762070 CAPLUS
DOCUMENT NUMBER: 130:26383
TITLE: Enzyme-containing bleaching composition for ligneous materials and its use
INVENTOR(S): Call, Hans Peter
PATENT ASSIGNEE(S): Call, Krimhild, Germany
SOURCE: Ger. Offen., 34 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19820947	A1	19981119	DE 1998-19820947	19980511 <--
DE 19820947	B4	20051201		

PRIORITY APPLN. INFO.: DE 1997-19719838 A1 19970512
OTHER SOURCE(S): MARPAT 130:26383
AB The composition contains an oxidation catalyst, an oxidizing agent, and ≥ 1 amide or imide or other organic carbonyl compound as mediator. Thus, an O2-dilignified softwood pulp was treated with O2 at 45°/1-10 bars and pH 4.5 in the presence of phthalhydrazide and laccase from Trametes versicolor, showing improved results vs. using hydroxybenzotriazole as mediator.
IT 80-51-3, 4,4'-Oxybis(benzenesulfonic acid) dihydrazide
RL: NUU (Other use, unclassified); USES (Uses)
(bleaching mediator; use of enzyme-containing bleaching composition for ligneous materials)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 11 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:674844 CAPLUS
DOCUMENT NUMBER: 129:331793
ORIGINAL REFERENCE NO.: 129:67657a,67660a
TITLE: Foamable polyethylene compositions for metallic pipe covering
INVENTOR(S): Sakamoto, Toshio; Ishihara, Koji
PATENT ASSIGNEE(S): Nippon Unicar Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10279722	A	19981020	JP 1997-106681	19970409 <--
JP 3973260	B2	20070912		
JP 2007100961	A	20070419	JP 2006-282242	20061017

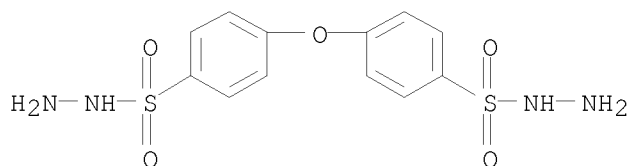
PRIORITY APPLN. INFO.: JP 1997-106681 A3 19970409

AB The title compns., with good thermal insulating and shock absorbing properties and giving corrosion-free insulated pipes (e.g., of Cu, Fe, Al), comprising ethylene polymers (e.g., polyethylene, EVA) 100, chemical blowing agents (e.g., 4,4'-oxybisbenzenesulfohydrazide, azodicarbonamide) containing residual halo impurities 0.1-10, and impurities scavengers [e.g., hydrotalcite, fatty acid salts, Zn stearate, Ca stearate, MgO, CaO, K2O, Mg(OH)2, Ca(OH)2, KOH, zeolite, dibutyltin dilaurate, dioctyltin dilaurate, Ca phosphate] 0.01-1 part.

IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (blowing agents, foam covering for metal pipes containing; foamable polyethylene compns. for metallic pipe covering)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 12 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:555622 CAPLUS

DOCUMENT NUMBER: 129:209365

ORIGINAL REFERENCE NO.: 129:42379a

TITLE: Thermal printing material containing sulfonic acid hydrazide compound

INVENTOR(S): Akutsu, Mitsuo; Oya, Keiji; Shigeno, Koichi

PATENT ASSIGNEE(S): Asahi Denka Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10226163	A	19980825	JP 1997-28165	19970212 <--

PRIORITY APPLN. INFO.: JP 1997-28165 19970212

OTHER SOURCE(S): MARPAT 129:209365

AB The title material contains ≥1 sulfonic acid hydrazide compound
 X(p-C6H4SO2NHN:CHR)2 (X = bond, alkylene, O; R = alkyl, aryl which may be

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substituted for ≥ 1 selected from halo atoms and OH, alkyl, and alkoxy groups) in the heat-sensitive layer. The material shows high thermal sensitivity, and provides high d. and low fog images with excellent storage stability.

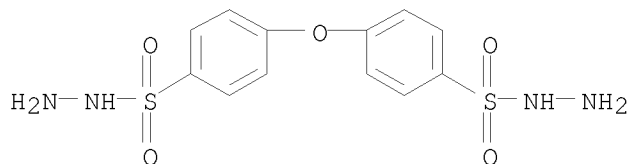
IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of sulfonic acid hydrazide)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



IT 95548-58-6P 200501-28-6P 212066-34-7P

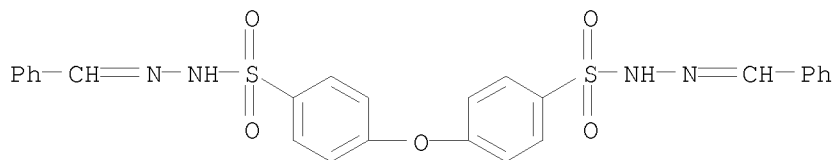
212066-37-0P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermal printing paper containing sulfonic acid hydrazide color developer)

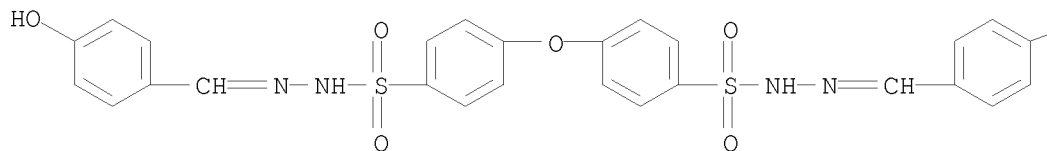
RN 95548-58-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[(phenylmethylene)hydrazide] (9CI)
(CA INDEX NAME)



RN 200501-28-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[4-(4-hydroxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)



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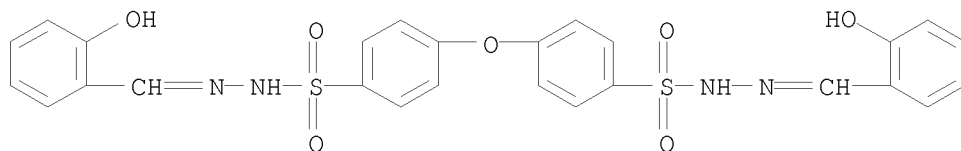
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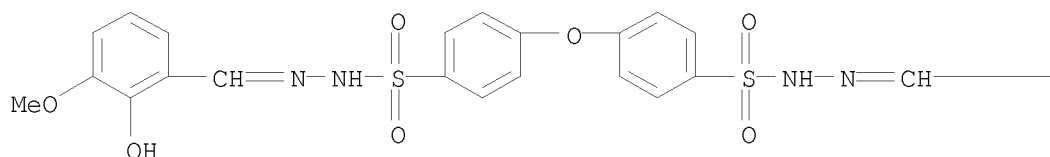
RN 212066-34-7 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[(2-hydroxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)



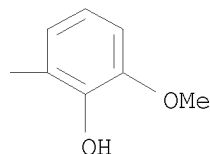
RN 212066-37-0 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[(2-hydroxy-3-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)



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IT 13279-37-3 212066-39-2 212066-41-6

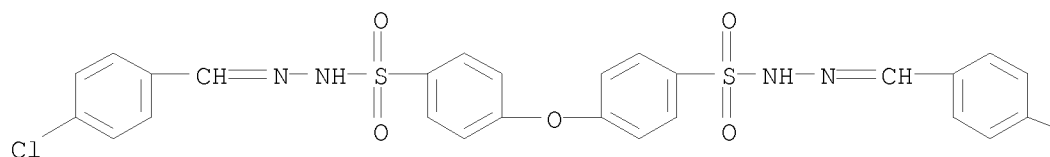
212066-42-7 212066-43-8

RL: TEM (Technical or engineered material use); USES (Uses)

(thermal printing paper containing sulfonic acid hydrazide color developer)

RN 13279-37-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[(4-chlorophenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)



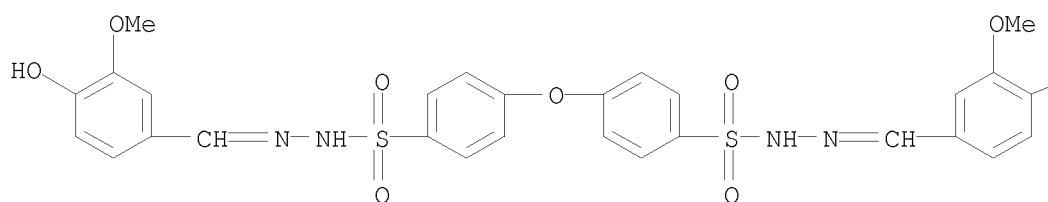
PAGE 1-A

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RN 212066-39-2 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[(4-hydroxy-3-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)

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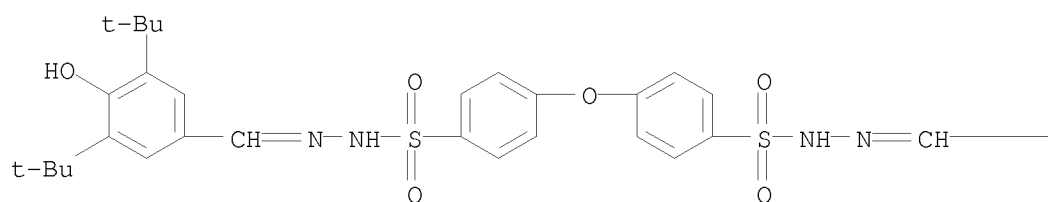
PAGE 1-B

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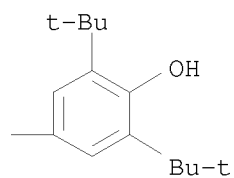
RN 212066-41-6 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methylene]hydrazide] (9CI) (CA INDEX NAME)

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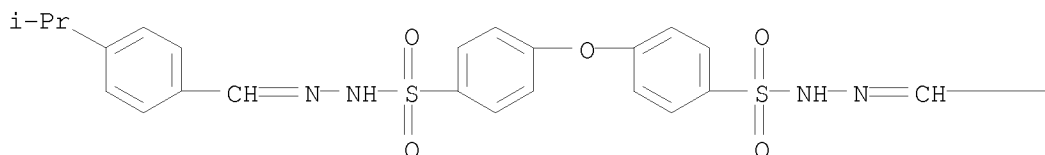


PAGE 1-B

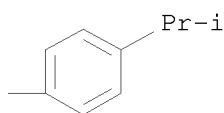


RN 212066-42-7 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, bis[[[4-(1-methylethyl)phenyl]methylene]hydrazide] (9CI) (CA INDEX NAME)

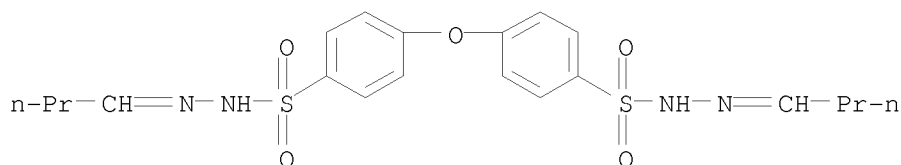
PAGE 1-A



PAGE 1-B



RN 212066-43-8 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, bis(butylidenehydrazide) (9CI) (CA INDEX NAME)



L13 ANSWER 13 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:488421 CAPLUS

DOCUMENT NUMBER: 129:136578

ORIGINAL REFERENCE NO.: 129:27925a,27928a

TITLE: Poly(ether sulfonamide)s with glycidyl pendant units

AUTHOR(S): Bicak, Niyazi; Senkal, Bahire Filiz; Tunca, Umit

CORPORATE SOURCE: Department Chemistry, Istanbul Technical University, Istanbul, TR-80626, Turk.

SOURCE: Polymer Bulletin (Berlin) (1998), 41(1), 7-14

CODEN: POBUDR; ISSN: 0170-0839

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB High-mol.-weight poly(ether sulfonamide) was prepared by condensation of 4,4'-dichlorosulfonyldiphenylether with ethylenediamine. The reaction of K salt of poly(ether sulfonamide) with epichlorohydrin gives the corresponding N-glycidyl derivative in a yield of 98%. The resulting polymer offers many functionalization possibilities through ring opening of the oxirane units. Also the glycidyl bearing polymer may act as

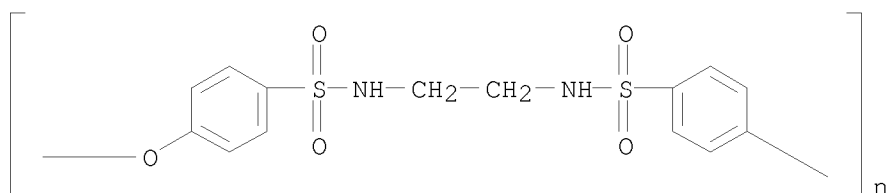
multifunctional post-crosslinking agent for polymers carrying hydroxy, amino, or carboxyl groups.

IT 57635-49-1DP, reaction products with epichlorohydrin, glycerol ether 57635-49-1P, 4,4'-Dichlorosulfonyldiphenyl ether-ethylenediamine copolymer, SRU

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties poly(ether sulfonamide)s with glycidyl pendant units)

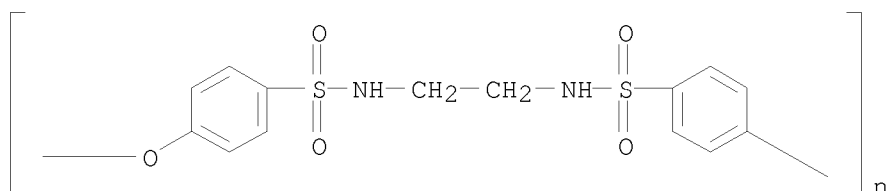
RN 57635-49-1 CAPLUS

CN Poly(oxy-1,4-phenylenesulfonylimino-1,2-ethanediyliminosulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



RN 57635-49-1 CAPLUS

CN Poly(oxy-1,4-phenylenesulfonylimino-1,2-ethanediyliminosulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



L13 ANSWER 14 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:337297 CAPLUS

DOCUMENT NUMBER: 128:322334

ORIGINAL REFERENCE NO.: 128:63899a,63902a

TITLE: Synthesis of 4,4'-oxybisbenzenesulfonyl hydrazide

AUTHOR(S): Yang, Yajiang; Niu, Baojie

CORPORATE SOURCE: Department of Chemistry, Huazhong University of Science and Technology, Wuhan, 430074, Peop. Rep. China

SOURCE: Jingxi Huagong (1998), 15(2), 33-35

CODEN: JIHUFJ; ISSN: 1003-5214

PUBLISHER: Jingxi Huagong Bianjibu

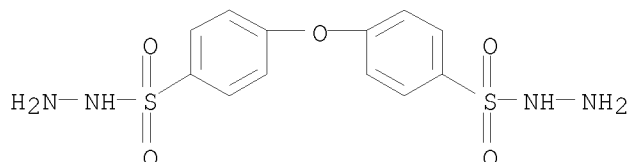
DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB 4,4'-Oxybisbenzenesulfonyl hydrazide (I) serves as blowing agent widely used in rubber and plastic industry. Di-Ph ether and sulfuric acid were reacted first and then treated with phosphorus oxychloride (POCl₃)., to give intermediate 4,4'-Oxybisbenzenesulfonyl chloride, which reacted with NH₃·H₂O and NH₂NH₂·H₂O at 30-40° for 3 h to give I.

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The synthesis conditions were seriously investigated.
IT 80-51-3P, 4,4'-Oxybisbenzenesulfonyl hydrazide
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP
(Preparation); USES (Uses)
(synthesis of 4,4'-oxybisbenzenesulfonyl hydrazide as blowing agent
for rubber or plastics)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

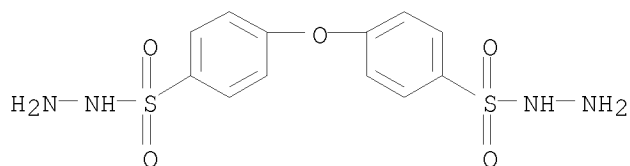


L13 ANSWER 15 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:62231 CAPLUS
DOCUMENT NUMBER: 128:115981
ORIGINAL REFERENCE NO.: 128:22733a,22736a
TITLE: Soy protein-based biodegradable thermoplastic
composition for foamed articles
INVENTOR(S): Jane, Jay-Lin; Zhang, Su She
PATENT ASSIGNEE(S): Iowa State University Research Foundation, Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 5710190	A	19980120	US 1995-487047	19950607 <--
PRIORITY APPLN. INFO.:			US 1995-487047	19950607

AB The composition, for foamed products with good phys. strength, good water resistance and thermal insulating properties, comprises soy protein, an organic plasticizing agent, a sulfonylhydrazide foaming agent and water. Thus, an article, having d. 0.45, tensile strength 1.41 Mpa and elongation 41.4%, was prepared by compression molding a powder composition made from soy protein containing Celogen OT 5, propylene glycol 25 and water 10 phr at 140°.

IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)
RL: MOA (Modifier or additive use); USES (Uses)
(blowing agents; soy protein-based biodegradable thermoplastic composition for foamed articles)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:25440 CAPLUS

DOCUMENT NUMBER: 128:116046

ORIGINAL REFERENCE NO.: 128:22745a, 22748a

TITLE: Resin compositions expandable and curable at room temperature and foaming of the compositions and cured products therefrom

INVENTOR(S): Touma, Seiji; Ando, Toshihiro

PATENT ASSIGNEE(S): Denki Kagaku Kogyo K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

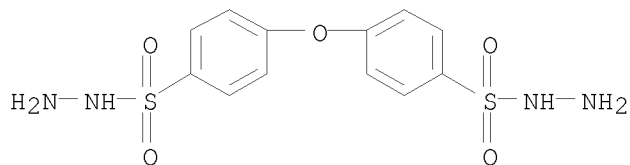
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10001557	A	19980106	JP 1996-152447	19960613 <--
PRIORITY APPLN. INFO.:			JP 1996-152447	19960613
AB The compns. contain sulfonyl hydrazides and decomposition accelerators and optionally contain radically polymerizable monomers and polymerization initiators. The cured products are useful as cellular construction materials (no data). Thus, 4,4'-oxybis(benzenesulfonyl hydrazide) 0.5, Co octoate 2.5, Me methacrylate 100, cumene hydroperoxide 1.0, and N,N-dimethyl-p-toluidine 1.0 part were mixed at 23° and 60% relative humidity to give a foam showing excellent foaming and curing properties.				
IT 80-51-3, 4,4'-Oxybis(benzenesulfonyl hydrazide)				
RL: NUU (Other use, unclassified); USES (Uses)				
(blowing agent; resin compns. expandable and curable at room temperature and foaming of the compns. for cured plastic foams)				
RN 80-51-3 CAPLUS				
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)				



L13 ANSWER 17 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:690888 CAPLUS
 DOCUMENT NUMBER: 127:360072
 ORIGINAL REFERENCE NO.: 127:70463a,70466a
 TITLE: Ink compositions and ink-jet recording using the same with improved image lightfastness and storability
 INVENTOR(S): Morimoto, Hitoshi; Oya, Hidenobu; Onodera, Akira; Ishibashi, Daisuke; Ninomya, Hidetaka
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09272830	A	19971021	JP 1996-85155	19960408 <--
PRIORITY APPLN. INFO.:			JP 1996-85155	19960408

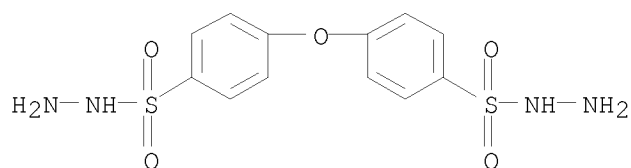
OTHER SOURCE(S): MARPAT 127:360072

AB The title compns. contain colorants and (R1NHNR2R3)nMm or [R4NHNR5C(:X)R6]nMm (R1, R2 = H, alkyl, alkoxy, aromatic group, heterocyclic group; R3 = H, alkyl, alkoxy, amidino, aromatic group, heterocyclic group, sulfonyl; R4 = H, alkyl, alkoxy, aromatic group, heterocyclic group, carbonyl; R5 = H, alkyl, alkoxy, amino, aromatic group, heterocyclic group, carbonyl; R6 = alkyl, alkoxy, amino, aromatic group, heterocyclic group, carbonyl; X = O, S; R2R3, R4R6, R5R6 = ring member; n = 1-3; m = 0-2; M = salt group), e.g., [NH2NHC(:NH)NH2]2.H2SO4.

IT 80-51-3, 4,4'-Bis(hydrazinosulfonyl)diphenyl ether
 RL: MOA (Modifier or additive use); USES (Uses)
 (ink compns. and ink-jet recording using the same with improved image lightfastness and storability)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 18 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

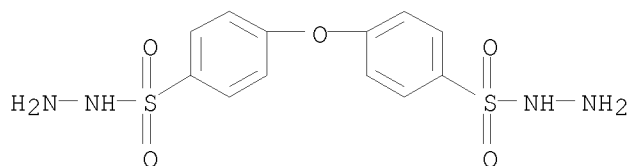
ACCESSION NUMBER: 1997:613949 CAPLUS
 DOCUMENT NUMBER: 127:264298
 ORIGINAL REFERENCE NO.: 127:51593a,51596a
 TITLE: Expandable electrically insulating polyethylene coating compositions and insulated electric wire
 INVENTOR(S): Sakamoto, Toshio; Yoshida, Mamoru; Inoue, Tatsuhiko; Tsukada, Kiroku
 PATENT ASSIGNEE(S): Nippon Unicar Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

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CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09227708	A	19970902	JP 1996-113016	19960411 <--
JP 3026755	B2	20000327		

PRIORITY APPLN. INFO.: JP 1995-349535 A 19951222
AB The compns. contain polyethylene 100, impurity-containing p,p'-oxybis(benzenesulfonylhydrazide) (I) 0.5-5, and impurity scavengers 0.005-0.5 part. Thus, kneading 1.3 parts 5% impurity-containing I with 100 parts a composition containing HDPE 30, antioxidants 0.2, and hydrotalcite [Mg₄Al₂(OH)₁₂CO₃·3H₂O] (impurity scavenger) 0.3 part, and coextruding with Cu wire gave an insulated cable showing no corrosion at 50° and 100% relative humidity after 300 days.
IT 80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide)
RL: TEM (Technical or engineered material use); USES (Uses)
(blowing agents; expandable elec. insulating polyethylene coatings and insulated elec. wire)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 19 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:590930 CAPLUS
DOCUMENT NUMBER: 127:177461
ORIGINAL REFERENCE NO.: 127:34379a,34382a
TITLE: Expandable epoxy resin sheets for gap fillers
INVENTOR(S): Kawaguchi, Yasuhiko; Nishama, Yukio
PATENT ASSIGNEE(S): Nitto Denko Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

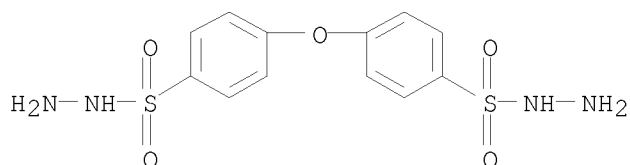
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09176616	A	19970708	JP 1995-339570	19951226 <--

PRIORITY APPLN. INFO.: JP 1995-339570 19951226

AB The sheets, useful for vibration dampers, sound insulators, thermal insulators, and reinforcements, are manufactured by using a composition containing liquid

epoxy resins, epoxy resin hardeners, blowing agents, and crosslinked phenoxy resins prepared by reacting phenoxy resins with polyisocyanates containing ≥ 2 isocyanate groups, wherein the total amount of epoxy resins and phenoxy resins is 5-20%, and the ratio of isocyanate groups of the polyisocyanates to the hydroxy groups of the phenoxy resins is 0.05-1.0.

IT 80-51-3, 4,4'-Oxybisbenzenesulfonyl hydrazide
 RL: TEM (Technical or engineered material use); USES (Uses)
 (blowing agents; expandable epoxy resin sheets for gap fillers)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 20 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:261903 CAPLUS

DOCUMENT NUMBER: 126:239237

ORIGINAL REFERENCE NO.: 126:46293a, 46296a

TITLE: Highly expandable electrically insulating ethylene polymer compositions and electric cables coated with them

INVENTOR(S): Sakamoto, Toshio; Inoe, Tatsuhiko; Yoshida, Mamoru

PATENT ASSIGNEE(S): Nippon Unicar Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09052983	A	19970225	JP 1995-226118	19950811 <--
JP 3523943	B2	20040426		
US 5643969	A	19970701	US 1996-678777	19960711 <--
PRIORITY APPLN. INFO.:			JP 1995-226118	A 19950811

AB Mixts. of (A) 100 parts long-side chain-containing ethylene polymers [d. 0.915-0.925 g/cm³, melt index (MI) 0.1-10.0 g/10 min] obtained by high pressure methods, (B) 30-200 parts high-d. ethylene polymers (m.p. measured by DSC $\geq 130^\circ$) 30-200, (C) polypropylene (I; m.p. measured by DSC $\geq 140^\circ$) 2-50, and (D) silane couplers 0.1-2.0 parts were kneaded at $\geq 140^\circ$, mixed with 0.5-3.0 parts p,p'-oxybisbenzenesulfonylhydrazide (II) or 1: ≤ 3 mixts. of I/azodicarbonamide, and kneaded at 120-130 $^\circ$ to pre-expanding state of $\leq 5\%$. The resulting gas-expandable compns. (expansion degree $\geq 70\%$) and elec. cables coated with the compns., are also claimed. Thus, long side chain-having LDPE (d. 0.918 g/cm³, MI 2.3 g/10 min) 100, HDPE (m.p. 133 $^\circ$) 80, I (m.p. 155 $^\circ$) 5, vinyltriethoxysilane

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0.2, and butylated hydroxytoluene 0.3 part were kneaded at 150° to obtain a composition, 100 parts of which was mixed with 1.5 parts II and kneaded at 128° to obtain a sheet (expansion degree 4%). The sheet was pelletized, kneaded with N gas, and extruded on a Cu wire to give a test piece showing Young's modulus 0.75 kg/mm² and elec. capacitance 48 nF/Km.

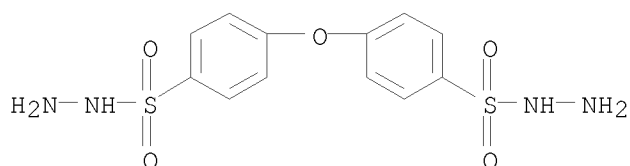
IT 80-51-3, p,p'-Oxybisbenzenesulfonylhydrazide

RL: MOA (Modifier or additive use); USES (Uses)

(blowing agents; highly expandable ethylene polymer-polypropylene compns. containing silane couplers and blowing agents for insulating elec. cables)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



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L13 ANSWER 21 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:215355 CAPLUS

DOCUMENT NUMBER: 126:200512

ORIGINAL REFERENCE NO.: 126:38749a,38752a

TITLE: Heat-resistant and flexible multilayered laminates having thermoplastic elastomer layers

INVENTOR(S): Iwashita, Toshuki; Nakagami, Sakuyoshi; Takoshi, Hirotaka

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09011384	A	19970114	JP 1995-162646	19950628 <--
JP 3515229	B2	20040405		

PRIORITY APPLN. INFO.: JP 1995-162646 19950628

AB The laminates consist of ≥3 layers including a surface layer (i) comprising thermoplastic elastomers (Shore A hardness 55-96), a foamed layer (ii) obtained from 100 parts ethylenic copolymers which contain 30-99.8% ethylene (I) units and have ≥1 groups selected from OH, CO₂H, acid anhydride group, and its half ester, 0.01-3 parts organic peroxides, and 0.1-40 parts blowing agents that are degraded at 100-250°, and a base layer (iii) comprising wood-based phenolic resins. I-propylene-ethylidenenorbornene terpolymer 49, polypropylene 20,

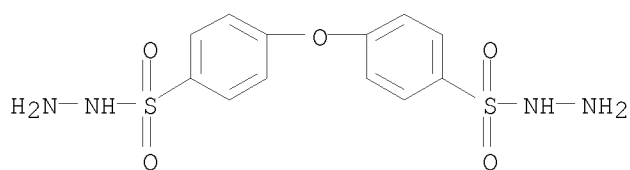
naphthenic process oil 30, and 2/3/5 1,3-bis(tert-butylperoxyisopropyl)benzene/trimethylolpropane triacrylate/paraffin oil mixture 1% were mixed and crosslinked to give a thermoplastic elastomer (Shore A hardness 71), which was made into a sheet. Sep., a foamed sheet was prepared from a composition containing I-2-hydroxyethyl methacrylate-Me acrylate copolymer 100, dicumyl peroxide 0.8, and 50/50 azodicarbonamide/ZnO mixture 5 parts. Laminating a phenolic resin-impregnated pulp sheet with the foamed sheet and the thermoplastic elastomer sheet using hot press gave a laminate which showed good heat resistance, cushioning property, and interlayer bonding strength.

IT 80-51-3

RL: MOA (Modifier or additive use); USES (Uses)
(heat-resistant and flexible multilayered laminates having thermoplastic elastomer layers)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 22 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:174571 CAPLUS

DOCUMENT NUMBER: 126:172756

ORIGINAL REFERENCE NO.: 126:33365a,33368a

TITLE: Multilayer laminates with good heat resistance and cushion property for interior materials of vehicles, ships, and buildings

INVENTOR(S): Iwashita, Toshuki; Nakagami, Sakuyoshi; Kira, Juji; Takoshi, Hirotaka

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

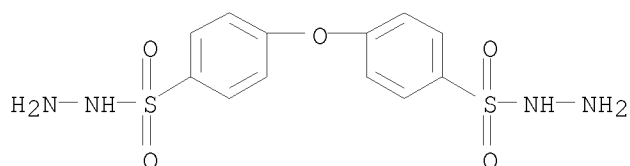
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09001709	A	19970107	JP 1995-150736	19950616 <--
JP 3499650	B2	20040223		

PRIORITY APPLN. INFO.: JP 1995-150736 19950616

AB Title laminates are composed of ≥ 3 layers containing (i) surface layers from thermoplastic elastomers [Shore A hardness (SH) 55-96], (ii) cellular layers obtained by foaming compns. containing (A) 100 parts ethylene-based copolymers (ethylene unit content 30-99.8%) having ≥ 1 groups chosen from OH, amino, CO₂H, acid anhydride, and its half ester groups, (B) 0.05-20 parts blocked isocyanates having ≥ 2 protected isocyanate groups, and (C) 0.1-40 parts blowing agents (decomposable at

100-250°), and (iii) base layers from woody phenolic resins. Thus, (i) a 0.5 mm-thick surface layer [prepared from ethylene-ethylidenenorbornene-propylene copolymer 49, polypropylene 20, process oil 30, and 1,3-bis(tert-butylperoxyisopropyl)benzene/trimethylolpropane triacrylate/mineral oil (2/3/5) mixture 1%; SH = 71] was laminated with (ii) a 1 mm-thick sheet [prepared from 86.7:5.2:8.1 ethylene-2-hydroxyethyl methacrylate-Me acrylate copolymer 100, ϵ -caprolactam-protected ethylene glycol-isophorone diisocyanate (1:2) adduct 4.0, and azodicarbonamide/ZnO (50/50) mixture 5 parts] and (iii) a 3 mm-thick base layer from a resin board (prepared by impregnating phenolic resins into pulp fibers), and heat-pressed to give a laminate showing (ii) thickness 3 mm (expansion ratio 5.2 times), good heat resistance, and cushion property.

IT 80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide)
 RL: MOA (Modifier or additive use); USES (Uses)
 (blowing agent, cellular layer component; multilayer laminates with good heat resistance and cushion property for interior materials of vehicles, ships, and buildings)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



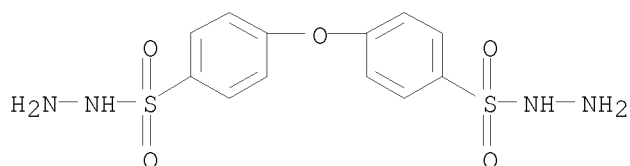
L13 ANSWER 23 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1997:150910 CAPLUS
 DOCUMENT NUMBER: 126:158559
 ORIGINAL REFERENCE NO.: 126:30655a,30658a
 TITLE: Vinyl chloride resin compositions with good processability and expandability for wood substitutes
 INVENTOR(S): Morita, Hidefumi; Sawara, Takashi
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08333469	A	19961217	JP 1995-141835	19950608 <--
PRIORITY APPLN. INFO.:			JP 1995-141835	19950608
OTHER SOURCE(S):	MARPAT 126:158559			

AB The compns. contain (A) vinyl chloride resins 100, (B) wood powders (containing $\geq 95\%$ particles passing a 60-mesh screen and $\geq 70\%$ particles passing a 250-mesh screen) 40-175, (C) thermally decomposable organic blowing agents premixed with the wood powders 0.1-5, (D) (meth)acrylate resins (weight-average mol. weight 2,500,000-6,000,000) 8-40, and (E)

≥ 1 compound (m.p. 90-170°) 0.2-10 parts, chosen from (R1CONH)2(CH2)m, (R2NHCO)2(CH2)m, R3NHCONHR4, (R5NHCONH)2(CH2)m, and R6NHCONH(CH2)nR7(CH2)nNHCONHR6 [R1, R2, R6 = (hydroxy)alkyl; R3-R5 = (hydroxy)alkyl, Ph; R7 = (Me-substituted) phenylene; m = 1-10; n = 0-6]. Thus, PVC 100, mixture of 100 parts wood powder with 2.5 parts Vinyfor AC 1 45, Me methacrylate-Bu acrylate copolymer 10, and ethylenebisstearamide 0.5 part were molded to give foams having d. 0.55, good processability, discoloration resistance, good surface smoothness and gloss.

IT 80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide)
 RL: TEM (Technical or engineered material use); USES (Uses)
 (blowing agents, Neocellborn N 50; PVC compns. with good processability and expandability for wood substitutes)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 24 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:144275 CAPLUS

DOCUMENT NUMBER: 126:145182

ORIGINAL REFERENCE NO.: 126:28057a,28060a

TITLE: Heat-resistant multilayered laminates having thermoplastic elastomer surface layers

INVENTOR(S): Takoshi, Hirotaka; Nakagami, Sakuyoshi; Kira, Juji

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08323905	A	19961210	JP 1995-134272	19950531 <--
JP 3504382	B2	20040308		

PRIORITY APPLN. INFO.: JP 1995-134272 19950531

AB Title laminates, useful for interior materials of automobiles, ships, etc., comprise (A) thermoplastic elastomer surface layers with Shore hardness 55-96, (B) cellular layers obtained from 100 parts mixts. of (a) 1-99% copolymers containing 30-99.5% ethylene and ≥ 1 monomers selected from unsatd. carboxylic acids, unsatd. dicarboxylic acids, their anhydrides, and their half esters and (b) 1-99% copolymers containing 30-99.5% ethylene and ≥ 1 monomer selected from epoxy-containing unsatd. compds., amino-containing unsatd. compds., and OH-containing unsatd. compds. and 0.1-50 parts organic blowing agents with decomposition temperature 100-250°, and (C) wood-based phenolic resin substrates. Thus, a laminate comprising (A) an

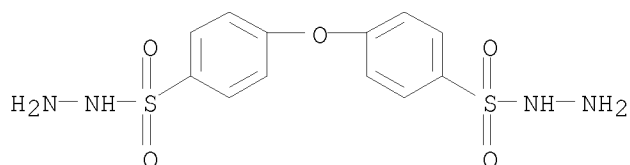
ethylene-ethylidenenorbornene-propylene copolymer elastomer surface layer, (B) a cellular layer containing acrylic acid-ethylene copolymer, ethylene-glycidyl methacrylate copolymer, azodicarbonamide, and ZnO and (C) a phenolic resin-impregnated pulp fiber substrate showed good heat resistance and flexibility.

IT 80-51-3

RL: NUU (Other use, unclassified); USES (Uses)
(blowing agents; heat-resistant multilayered laminates having thermoplastic elastomer surface layer)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 25 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:110904 CAPLUS

DOCUMENT NUMBER: 126:118751

ORIGINAL REFERENCE NO.: 126:22925a,22928a

TITLE: Multilayer laminates with good heat resistance and flexibility for interior materials of automobiles and ships

INVENTOR(S): Takoshi, Hirotaka; Nakagami, Sakuyoshi; Kira, Juji

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08290508	A	19961105	JP 1995-101472	19950425 <--
JP 3487960	B2	20040119		

PRIORITY APPLN. INFO.: JP 1995-101472 19950425

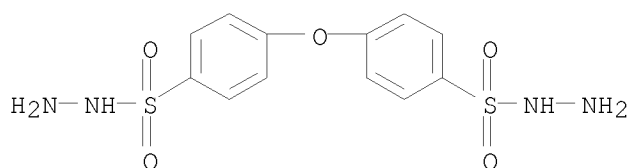
AB Title laminates are composed of ≥ 2 layers containing (i) surface layers from thermoplastic elastomers [Shore A hardness (SH) 55-96] and (ii) cellular layers obtained by expanding mixts. containing (A) 100 parts compns. containing (a1) 1-99% ethylene (I)-based copolymers prepared by copolymerization of I and ≥ 1 monomer chosen from unsaturated carboxylic acids, unsaturated dicarboxylic acids, their anhydrides, and their half esters (I content 30-99.5%) and (a2) 1-99% I-based copolymers prepared by copolymerization of I and ≥ 1 monomer chosen from epoxy group-, amino group-, or OH-containing unsaturated compounds (I content 30-99.5%) and (B) 0.1-50 parts blowing agents (decomposable at 100-250°). Thus, a thermoplastic elastomer sheet [prepared from I-ethylidenenorbornene-propylene terpolymer 49, polypropylene 20, process oil 30, and 1,3-bis(tert-Bu peroxyisopropyl)benzene/trimethylolpropane triacrylate/mineral oil (2/3/5) mixture 1%; SH = 71] and an

expandable sheet [prepared from 5 parts azodicarbonamide/ZnO (50/50) mixture and 100 parts composition containing 50% 7:93 acrylic acid-ethylene copolymer and 50% 94:6 ethylene-glycidyl methacrylate copolymer] were laminated and heat-pressed to give a laminate having expansion ratio of cellular layer 4.5 times, good heat resistance, and cushioning properties.

IT 80-51-3
 RL: MOA (Modifier or additive use); USES (Uses)
 (blowing agent; multilayer laminates with good heat resistance and flexibility for interior materials of automobiles and ships)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 26 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:88615 CAPLUS

DOCUMENT NUMBER: 126:105102

ORIGINAL REFERENCE NO.: 126:20289a

TITLE: Manufacture of multi-ply laminates including thermoplastic elastomers and cellular ethylene polymers with excellent heat resistance and cushioning properties

INVENTOR(S): Iwashita, Toshuki; Nakagami, Sakuyoshi; Kira, Juji; Takoshi, Hirotaka

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08294983	A	19961112	JP 1995-102676	19950426 <--
JP 3497273	B2	20040216		

PRIORITY APPLN. INFO.: JP 1995-102676 19950426

AB Title multi(≥ 2)-ply laminates, useful for automobile, vehicle, and ship interiors, are manufactured from thermoplastic elastomer [Shore A hardness (A) 55-96] skins and foamed layers obtained from compns. containing (a) 100 parts ethylene (I) copolymers (containing 30-99.8% I) with monomers having OH, COOH, amino, anhydride, and/or half ester group thereof, (b) 0.05-20 parts isocyanates with ≥ 2 blocked isocyanate groups, and (c) 0.1-40 parts blowing agents (decomposition temperature 100-250°). Thus, an Al press plate, a 1-mm foamed polymer sheet [prepared by T-die extruding a composition containing 88:6.8:5.2 I-2-hydroxyethyl methacrylate-Me acrylate copolymer

100, an ϵ -caprolactam-protected ethylene glycol-isophorone diisocyanate (1:2) adduct 3.0, and an azodicarbonamide-ZnO (50:50) mixture 5 parts], a 0.5-mm thermoplastic elastomer [A 71, prepared by crosslinking a composition containing I-ethylidenenorbornene-propylene (II) terpolymer 49, polypropylene 20, a naphthene-based process oil 30, and a 1,3-bis(tert-butylperoxyisopropyl)benzene-trimethylolpropane triacrylate-paraffin mineral oil (2:3:5) mixture 1% and T-die extruding] sheet, and a 3-mm spacer-fixed release-treated embossed Al press plate were laminated in that order and pressed for 5 min to obtain a 3.5-mm 2-layer embossed laminate (thickness of the expanded sheet 3 mm, expansion ratio 4.7) showing volume change <5% after 120° for 1 h and good cushioning properties.

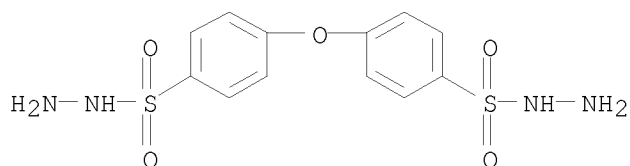
IT 80-51-3

RL: MOA (Modifier or additive use); USES (Uses)

(blowing agents; multi-ply laminates including thermoplastic elastomers and cellular ethylene polymers with excellent heat resistance and cushioning properties)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 27 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:79916 CAPLUS

DOCUMENT NUMBER: 126:90488

ORIGINAL REFERENCE NO.: 126:17461a,17464a

TITLE: Multilayer laminates with good heat resistance and cushion properties for interiors of automobiles and ships

INVENTOR(S): Iwashita, Toshuki; Nakagami, Sakuyoshi; Kira, Juji; Takoshi, Hirotaka

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08300580	A	19961119	JP 1995-115821	19950515 <--
JP 3515633	B2	20040405		

PRIORITY APPLN. INFO.: JP 1995-115821 19950515

AB Laminates are composed of ≥ 2 layers containing (i) surface layers from thermoplastic elastomers [Shore A hardness (SH) 55-96] and (ii) cellular layers from compns. containing (A) 100 parts ethylene (I) copolymers (I content 30-99.8%) substituted with ≥ 1 group chosen from OH, CO₂H,

acid anhydrides, and their half esters, (B) 0.01-3 parts organic peroxides, and (C) 0.1-40 parts blowing agents (decomposable at 100-250°). Thus, a 0.5 mm-thick thermoplastic elastomer sheet [prepared from I-ethylidenenorbornene-propylene terpolymer 49, polypropylene 20, process oil 30, and 1,3-bis(tert-butylperoxyisopropyl)benzene/trimethylolpropane triacrylate/mineral oil (2/3/5) mixture 1%; SH = 71] was laminated with a 1 mm-thick expandable sheet [prepared from a composition containing 79.2:6.8:14

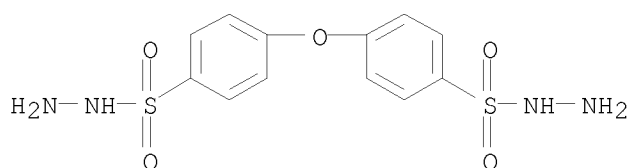
I-2- hydroxyethyl methacrylate-Me acrylate copolymer 100, dicumyl peroxide 0.8, and azodicarbonamide/ZnO (50/50) mixture 5 parts] and heat-pressed to give a laminate (cellular layer thickness 3 mm; expansion ratio 6.4) showing good heat resistance and cushion properties.

IT 80-51-3

RL: MOA (Modifier or additive use); USES (Uses)
(blowing agent, cellular layer component; multilayer laminates with good heat resistance and cushion property for interiors of automobiles and ships)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 28 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:6243 CAPLUS

DOCUMENT NUMBER: 126:32615

ORIGINAL REFERENCE NO.: 126:6599a,6602a

TITLE: Heat-resistant multilayer laminates with good cushioning property for interior materials of automobiles and ships

INVENTOR(S): Takoshi, Hiroataka; Nakagami, Sakuyoshi; Kira, Juji; Fujii, Akyuki

PATENT ASSIGNEE(S): Showa Denko Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08258202	A	19961008	JP 1995-68296	19950327 <--
JP 3504370	B2	20040308		

PRIORITY APPLN. INFO.: JP 1995-68296 19950327

AB Title laminates have ≥3 layers containing (A) surface layers from thermoplastic elastomers with Shore A hardness (H) 55-96, (B) cellular layers obtained by foaming mixts. containing (b1) 100 parts ethylene-radically polymerizable acid anhydride copolymers, (b2) 0.1-40 parts thermally

decomposable organic blowing agents, and optionally (b3) reactive compds. having ≥ 2 functional groups which can react with acid anhydrides (mol ratio of the functional group in b3 based on acid anhydride group in b1 is 0.01-10), and (C) wood-based phenolic resin base layers. Thus, (A) a thermoplastic elastomer sheet [prepared from ethylene-ethylidenenorbornene-propylene terpolymer 49, polypropylene 20, naphthenic process oil 30, and 1,3-bis(tert-butylperoxyisopropyl)benzene/trimethylolpropane triacrylate/paraffin oil (2/3/5) mixture 1%; H = 71], (B) a cellular sheet [prepared from 100 parts ethylene-maleic anhydride (I) copolymer (containing 2.0% I) and 5 parts azodicarbonamide/ZnO (50/50) mixture], and (C) a base sheet (prepared from pulp fibers and phenolic resin) were laminated and hot-pressed to give a laminate with good heat resistance and cushioning property.

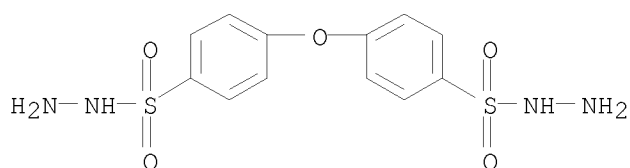
IT 80-51-3

RL: MOA (Modifier or additive use); USES (Uses)

(blowing agent; heat-resistant multilayer laminates with good cushioning property and their use in automobile interior)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 29 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1996:142140 CAPLUS

DOCUMENT NUMBER: 124:189525

ORIGINAL REFERENCE NO.: 124:34819a,34822a

TITLE: Positive-working photosensitive composition.

INVENTOR(S): Kawamura, Koichi; Sato, Kenichiro; Sakaguchi, Shinji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 684521	A1	19951129	EP 1995-108028	19950524 <--
EP 684521	B1	19980114		
R: BE, DE				
JP 08044055	A	19960216	JP 1995-69586	19950328 <--
JP 3503839	B2	20040308		
US 5609983	A	19970311	US 1995-449294	19950524 <--
PRIORITY APPLN. INFO.:			JP 1994-111441	A 19940525
			JP 1995-69586	A 19950328

OTHER SOURCE(S): MARPAT 124:189525

AB There is provided a pos.-working photosensitive composition suitable for

10/923,271

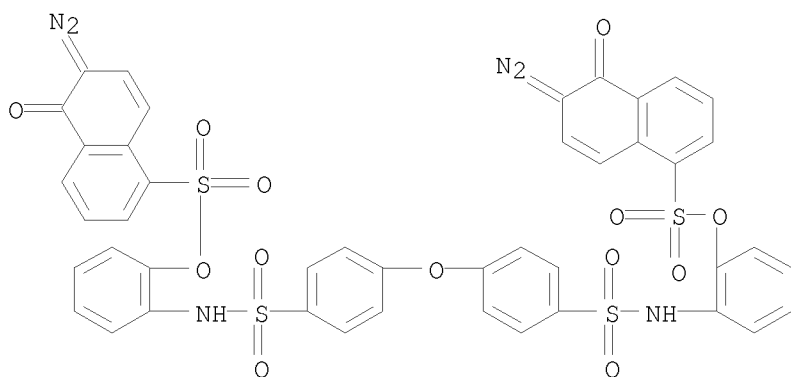
photosensitive lithog. printing plate or photoresist for fine processing, which comprises a quinonediazide ester compound having a structure characterized by containing in the same mol. both a quinonediazido structure and N-sulfonylamido or sulfonamido structure which are positioned independently of each other.

IT 174140-40-0

RL: TEM (Technical or engineered material use); USES (Uses)
(in pos.-working photosensitive compns. for resist pattern formation and lithog. plate manufacture)

RN 174140-40-0 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, oxybis(4,1-phenylenesulfonylimino-2,1-phenylene) ester (9CI) (CA INDEX NAME)



IT 174290-47-2P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and use in pos.-working photosensitive compns. for resist pattern formation and lithog. plate manufacture)

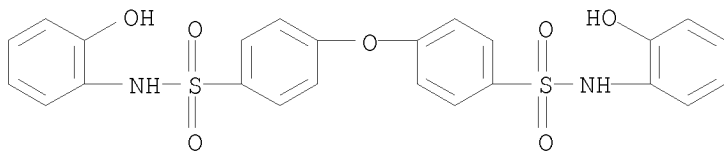
RN 174290-47-2 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with 4,4'-oxybis[N-(2-hydroxyphenyl)benzenesulfonamide] (9CI) (CA INDEX NAME)

CM 1

CRN 174140-33-1

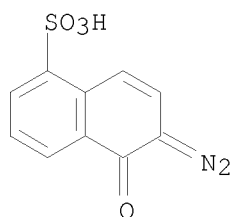
CMF C24 H20 N2 O7 S2



CM 2

CRN 20546-03-6

CMF C10 H6 N2 O4 S



L13 ANSWER 30 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:969418 CAPLUS

DOCUMENT NUMBER: 124:202946

ORIGINAL REFERENCE NO.: 124:37537a

TITLE: Preparation of sulfate esters of sugar alcohols for the treatment of arteriosclerotic changes in the vascular walls.

INVENTOR(S): Chucholowski, Alexander; Fingerle, Juergen; Iberg, Niggi; Maerki, Hans Peter; Mueller, Rita; Pech, Michael; Rouge, Marianne; Schmid, Gerard; Tschopp, Thomas; Wessel, Hans Peter

PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.

SOURCE: Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 663391	A1	19950719	EP 1995-100180	19950109 <--
EP 663391	B1	19970409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5521160	A	19960528	US 1995-368519	19950104 <--
CA 2139720	A1	19950715	CA 1995-2139720	19950106 <--
ZA 9500086	A	19950720	ZA 1995-86	19950106 <--
AU 9510106	A	19950727	AU 1995-10106	19950109 <--
AU 685196	B2	19980115		
HU 72412	A2	19960429	HU 1995-52	19950109 <--
AT 151416	T	19970415	AT 1995-100180	19950109 <--
ES 2101583	T3	19970701	ES 1995-100180	19950109 <--
IL 112284	A	19981030	IL 1995-112284	19950109 <--
FI 9500127	A	19950715	FI 1995-127	19950111 <--
CN 1109889	A	19951011	CN 1995-101166	19950111 <--
CN 1043349	B	19990512		
RU 2139854	C1	19991020	RU 1995-100773	19950111 <--
NO 9500137	A	19950717	NO 1995-137	19950113 <--
JP 07206803	A	19950808	JP 1995-3729	19950113 <--
JP 2862489	B2	19990303		
PL 180273	B1	20010131	PL 1995-306797	19950113
BR 9500096	A	19951031	BR 1995-96	19951013 <--

PRIORITY APPLN. INFO.:

CH 1994-114

A 19940114

CH 1994-3315

A 19941107

OTHER SOURCE(S):

CASREACT 124:202946; MARPAT 124:202946

AB AX(CH₂)mB(CH₂)pXA [A = sugar alc. residue (derivative), tris(hydroxymethyl)methyl; ≥1 of the A OH groups are esterified with H₂SO₄; jX = NR₁CO, NHCONH, NHCSNH, NHSO₂, NR₁, O; m, p = 0, 1; R₁ = H, alkyl, hydroxyalkyl; B = system of conjugated multiple bonds], were prepared. Thus, (Z)-3-[3-biphenyl-4-yloxymethyl-5-[(Z)-3-carboxyacryloylamino]phenylcarbamoyl]acrylic acid in DMF was treated successively with 4-methylmorpholine, 2-chloro-4,6-dimethoxy-1,3,5-triazine, and D-glucamine to give (Z)-butenedioic acid (Z)-[3-biphenyl-4-yloxymethyl-5-(3-D-glucit-1-ylcarbamoylacryloylamino)phenylamide]-D-glucit-1-ylamide, which was converted to (Z)-butenedioic acid (Z)-[3-biphenyl-4-yloxymethyl-5-[3-(2,3,4,5,6-penta-O-sulfo-D-glucit-1-ylcarbamoyl)acryloylamino]phenylamide]-[3-(2,3,4,5,6-penta-O-sulfo-D-glucit-1-yl)amide]. The latter had 2.2 times the antiproliferative activity of heparin without showing appreciable anticoagulative activity.

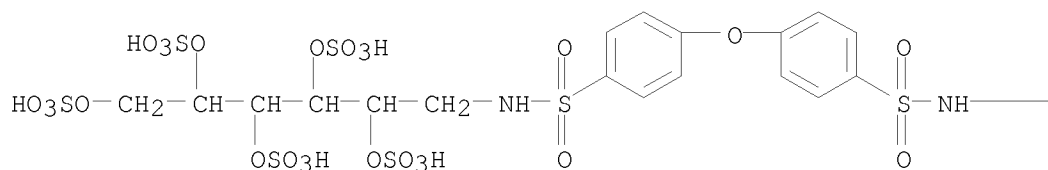
IT 171239-06-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfate esters of sugar alcs. for the treatment of arteriosclerotic changes in the vascular walls)

RN 171239-06-8 CAPLUS

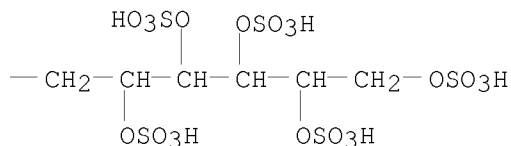
CN D-Glucitol, 1,1'-[oxybis(4,1-phenylenesulfonylimino)]bis[1-deoxy-, 2,2',3,3',4,4',5,5',6,6'-decakis(hydrogen sulfate), decasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



●10 Na

PAGE 1-B



IT 171240-02-1P

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

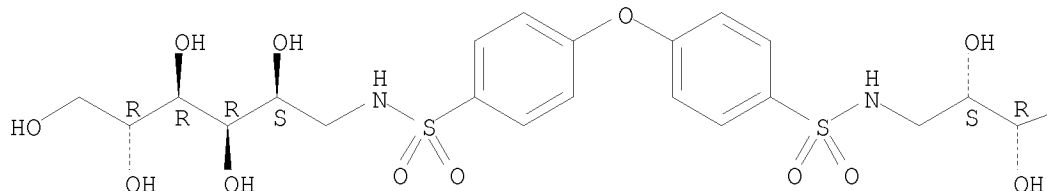
(preparation of sulfate esters of sugar alcs. for the treatment of
arteriosclerotic changes in the vascular walls)

RN 171240-02-1 CAPLUS

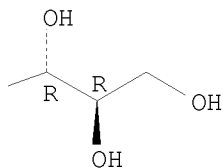
CN D-Glucitol, 1,1'-[oxybis(4,1-phenylenesulfonylimino)]bis[1-deoxy- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L13 ANSWER 31 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:929562 CAPLUS

DOCUMENT NUMBER: 124:189520

ORIGINAL REFERENCE NO.: 124:34819a,34822a

TITLE: Chemical amplification-type resist compositions

INVENTOR(S): Kajita, Tooru; Suzuki, Masamutsu; Oota, Toshuki;
Tsuiji, Akira

PATENT ASSIGNEE(S): Japan Synthetic Rubber Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

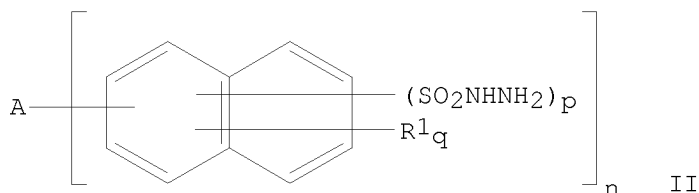
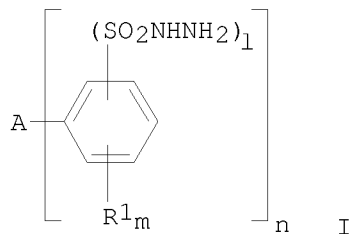
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07219217	A	19950818	JP 1994-27357	19940131 <--
JP 3358272	B2	20021216		
PRIORITY APPLN. INFO.:			JP 1994-27357	19940131
OTHER SOURCE(S):	MARPAT	124:189520		
GI				



AB The title resist compns., which contain a radiation-sensitive acid-generating agent and undergo a chemical change by the catalytic action of the acid generated by irradiation to change the solubility of the radiation-irradiated area in developer to form a pattern, contain a basic compound which is pyrolyzed upon baking after the irradiation to convert into a neutral substance. The basic compound may be a sulfonylhydrazide compound I or II ($\text{R}^1 = \text{OH}$, halo, C1-6 alkyl, C1-6 alkoxy, C6-15 aryl, C7-18 aralkyl; $n = 1, 2$; $1 \leq l \leq 5$; $0 \leq m \leq 4$, $1 \leq l + m \leq 5$; $1 \leq p \leq 7$; $0 \leq q \leq 6$, $1 \leq p + q \leq 7$; A is H or R^1 when $n = 1$ and a divalent group or single bond when $n = 2$). The compns. show good stability in post exposure time delay and provide high-resolution patterns with good profile and thermal resistance. Thus, a resist comprised a reaction product of poly(hydroxystyrene) with hexamethyldisilazane, $\text{Ph}_3\text{S}^+.\text{CF}_3\text{SO}_3^-$, and a mixture of 4-methylbenzenesulfonylhydrazide and 4,4'-oxybis(benzenesulfonylhydrazide) was prepared

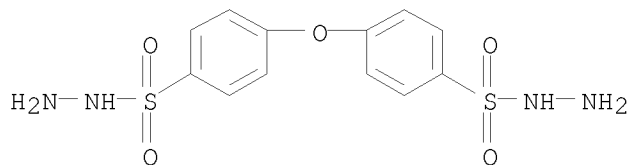
IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(chemical amplified resist compns. containing sulfonylhydrazides for post exposure time delay stability and high-resolution patterns)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



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L13 ANSWER 32 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:723369 CAPLUS
DOCUMENT NUMBER: 123:146192
ORIGINAL REFERENCE NO.: 123:26037a
TITLE: Ethylene copolymer-based crosslinked closed-cell foam moldings and their manufacture
INVENTOR(S): Mikawa, Yasuhiro; Takoshi, Hirotaka; Okamoto, Yukio
PATENT ASSIGNEE(S): Showa Denko Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 07138398	A	19950530	JP 1993-288444	19931117 <--
JP 3212430	B2	20010925		

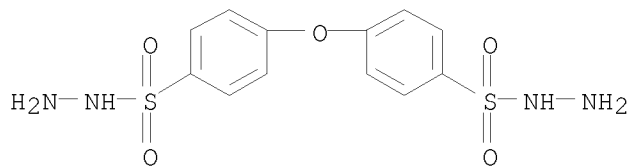
PRIORITY APPLN. INFO.: JP 1993-288444 19931117

AB The title moldings, with low d. and good softness and heat resistance, useful for interior of automobiles, buildings, etc. (no data), are manufactured from (a) copolymer containing ethylene and 0.1-20% radical polymerizable acid anhydrides (e.g., ethylene-maleic anhydride-Me acrylate copolymer), (b) polyols (e.g., trimethylolpropane), (c) 0.1-40 phr organic blowing agents with decomposition temperature >120° (e.g., azodicarbonamide), and optionally (d) organic metal salts as accelerators (e.g., ethylene-methacrylic acid copolymer Na salt).

IT 80-51-3, 4,4'-Oxybisbenzenesulfonylhydrazide
RL: MOA (Modifier or additive use); USES (Uses)
(blowing agents; ethylene copolymer-based crosslinked closed-cell foam moldings and their manufacture)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 33 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:668360 CAPLUS
DOCUMENT NUMBER: 123:259254
ORIGINAL REFERENCE NO.: 123:46337a, 46340a
TITLE: Urethane prepolymer compositions for automobile vibration dampers with good chipping resistance
INVENTOR(S): Koseki, Mitsuo; Shimada, Toshiro; Fujita, Masayoshi
PATENT ASSIGNEE(S): Sanyo Chemical Ind Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

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LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07102171	A	19950418	JP 1993-270040	19931001 <--
JP 2700525	B2	19980121		

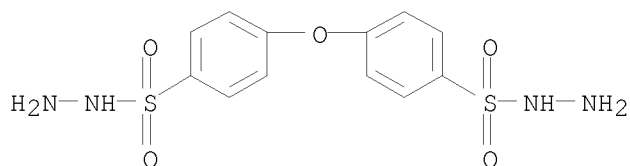
PRIORITY APPLN. INFO.: JP 1993-270040 19931001

AB Title compns. comprise bituminous substances, polydiene-containing blocked urethane prepolymers, organic polyamines, and alkylphenols. Thus, FR-LA (bituminous substance) 1000, nonylphenol 50, blocked urethane prepolymer obtained from Poly bd-R 15HT, isophorone diisocyanate, and Me Et ketoxime 900, isophoronediamine 89, dioctyl phthalate 100, NCC 110 (CaCO₃) 1200, dibutyltin dilaurate 33, and 4,4'-oxybis(benzenesulfonylhydrazide) 27 parts were kneaded to give a composition with viscosity 300 PS initially and 350 PS after 10 day at 40°.

IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)
RL: NUU (Other use, unclassified); USES (Uses)
(blowing agents; polyurethane blends containing bituminous substances for automobile vibration dampers with good chipping resistance)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 34 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:536175 CAPLUS

DOCUMENT NUMBER: 123:171756

ORIGINAL REFERENCE NO.: 123:30648h,30649a

TITLE: The new noise absorbing and vibration damping polyurethane material

AUTHOR(S): Hasegawa, H.; Usami, K.; Sugihara, H.

CORPORATE SOURCE: Bridgestone Corporation, Yokohama, 244, Japan

SOURCE: Polyurethanes 94, Proc. Polyurethanes Conf. (1994), 640-5. Soc. Plast. Ind. Polyurethane Div.: New York, N. Y.

CODEN: 61AAAF

DOCUMENT TYPE: Conference

LANGUAGE: English

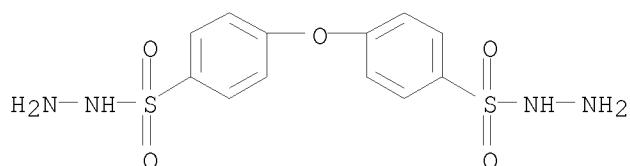
AB The purpose of this paper is to illustrate the work (carried out by Bridgestone Corporation in Japan) on the new high performance sealing froth urethane foam that is lightweight and even a small amount fully fills a cavity in a pillar. Bridgestone Corporation successfully developed the new performance froth of sheet shape with long experience efforts that is prepared sealing materials by furnishing a polydiene polyol or polyolefin polyol, and an organic isocyanate compound, silicon surfactant, a blowing agent, and an inert gas by mech. agitation. When this sheet shaped froth

urethane foam is heated above the decomposition temperature of the blowing agent during a paint coat baking or drying step, the blowing agent is decomposed to incur foaming and then can fill the cavity fully. These frothed materials are advantageously used not only in filling cavity in automobile pillar, but also for vibration damping in elec. washing machine, refrigerators and air conditioners and for heat insulation and buffer in elec. and other parts. These frothed materials are very light weight itself and have a high blowing magnification so that a large cavity can be filled with a relatively small amount of the sealing material. The foamed product resulting from this material has very high quality and uniformity. Using this material can achieve a high performance, weight reduction, cost saving and perfectly filled cavity for automobile pillars and other application parts.

IT 80-51-3, Obsh
 RL: MOA (Modifier or additive use); USES (Uses)
 (blowing agent; noise absorbing and vibration damping polyurethane material)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 35 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:511511 CAPLUS

DOCUMENT NUMBER: 122:242484

ORIGINAL REFERENCE NO.: 122:44279a,44282a

TITLE: Foamable urethane materials, their preparation and use for sealing automotive parts

INVENTOR(S): Hasegawa, Hajime; Usami, Kazuyoshi

PATENT ASSIGNEE(S): Bridgestone Corp., Japan

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 625559	A1	19941123	EP 1994-301538	19940303 <--
EP 625559	B1	19980603		
R: BE, DE, GB				
JP 06330021	A	19941129	JP 1993-142976	19930521 <--
US 5496868	A	19960305	US 1994-237101	19940503 <--
PRIORITY APPLN. INFO.:			JP 1993-142976	A 19930521
AB The title materials are prepared by furnishing a liquid composition comprising a				

polydiene or polyolefin polyol, a polyisocyanate compound, a foam stabilizer, and a blowing agent, introducing an inert gas, shaping the bubbled composition into a sheet with uniform dispersion of bubbles, and heat curing the sheet at a temperature below the decomposition temperature of the blowing agent.

The lightweight sealing material is placed in a cavity of an automotive pillar or similar member and heated to fill the cavity with the foamed product. A foamable formulation of Polybd R-15HT 100, Sumidur PF 21.7, butanediol 4.0, catalyst 0.01, foam stabilizer 1.5, CaCO₃ 10, and 4,4'-oxybisbenzenesulfonyl hydrazide 15 parts (NCO index 70) was blown with air, formed into a sheet, and cured at 60° for 15 min; the sheet having d. 0.85 g/cm³.

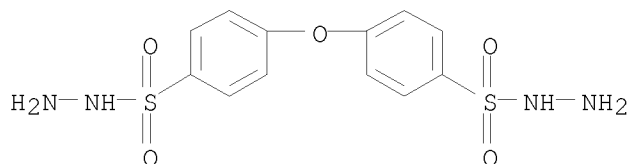
IT 80-51-3, 4,4'-Oxybisbenzenesulfonyl hydrazide

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(blowing agent; sealing material for automotive cavity)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 36 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:232160 CAPLUS

DOCUMENT NUMBER: 120:232160

ORIGINAL REFERENCE NO.: 120:40893a, 40896a

TITLE: Waterless photosensitive lithographic plate and its manufacture

INVENTOR(S): Sasa, Nobumasa; Taniguchi, Tetsuya; Kojima, Noryoshi; Tomyasu, Hiroshi; Kasakura, Akio

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan; Mitsubishi Chemical Industries Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05303195	A	19931116	JP 1992-131954	19920424 <--
PRIORITY APPLN. INFO.:			JP 1992-131954	19920424

AB Claimed are (1) a waterless photosensitive lithog. plate including a support, a primer layer, a photosensitive layer containing ≥1 dyes selected from a diazo compound, azide, and a quinonediazide, an ink-repellent layer, and a protecting layer comprising a continuous phase involving a discontinuous phase with good gas permeability and (2) manufacture of the plate by a process including formation of the discontinuous phase

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in the protecting layer by addition of a blowing agent or by dispersing with a polymer particle. The plate shows scratching resistance.

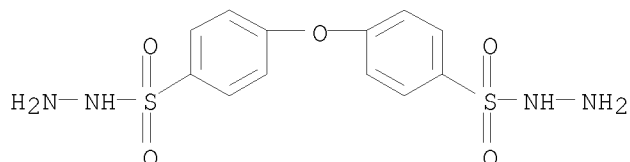
IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)

RL: USES (Uses)

(blowing agent, formation of gas-permeable phase in protecting layer by, for waterless photosensitive lithog. plate)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 37 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:137040 CAPLUS

DOCUMENT NUMBER: 120:137040

ORIGINAL REFERENCE NO.: 120:24121a,24124a

TITLE: Methods for manufacturing bacteria-resisting and deodorizing fabrics and rubber shoes

INVENTOR(S): Yuan, Qinhua; Zheng, Penglu; Yang, Huixin; et al.

PATENT ASSIGNEE(S): China Textile University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1070237	A	19930324	CN 1992-111004	19920926 <--
PRIORITY APPLN. INFO.:			CN 1992-111004	19920926

AB A composition for the title method contains 2,4,4'-trichloro-2'-hydroxydiphenyl ether, polyoxyethylene alkyl ethers, polyoxyethylene alkylphenyl ethers, chlorinated paraffins, and water in ratios 1:(0.5-4):(0.3-2):(0.2-1):(10-50).

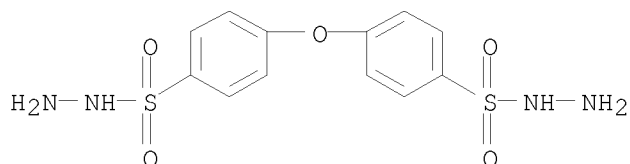
IT 80-51-3

RL: USES (Uses)

(for rubber insoles for shoes)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

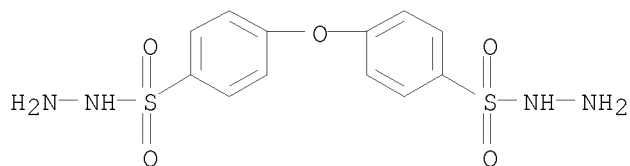


L13 ANSWER 38 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:451170 CAPLUS
 DOCUMENT NUMBER: 119:51170
 ORIGINAL REFERENCE NO.: 119:9277a,9280a
 TITLE: Electrically conducting rubber foam compositions for rolls of electrophotographic copying machines
 INVENTOR(S): Ishihara, Ko; Hashimoto, Kazunobu; Kato, Hiroyasu
 PATENT ASSIGNEE(S): Tokai Rubber Ind Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05059206	A	19930309	JP 1991-250514	19910902 <--
PRIORITY APPLN. INFO.:			JP 1991-250514	19910902

AB Title compns. contain natural and/or synthetic solid rubbers, liquid rubbers, blowing agents, and elec. conducting fillers. A mixture of ethylene-propene rubber 50, LIR 290 (isoprene rubber) 50, Ketjen Black 15, CaCO₃ 10, and Cellmic S 6 parts was kneaded and extruded to give rolls showing hardness 14° (JIS A), volume resistivity 2000 Ω-cm, and no bleed-out.
 IT 80-51-3, Cellmic S
 RL: USES (Uses)
 (blowing agents, for rubber rolls for electrophotog. copiers)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 39 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:255888 CAPLUS
 DOCUMENT NUMBER: 118:255888
 ORIGINAL REFERENCE NO.: 118:44485a,44488a
 TITLE: The thermooxidative stability of cured epoxy resins. I
 AUTHOR(S): Burton, Bruce L.
 CORPORATE SOURCE: Resins Res. Dev. Dep., Dow Chem. Co., Freeport, TX, 77566, USA
 SOURCE: Journal of Applied Polymer Science (1993), 47(10), 1821-37
 CODEN: JAPNAB; ISSN: 0021-8995
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Predominant degradation pathways and cured resin systems that are

thermooxidatively stable in 125° air are identified. Based on flexural property retention and IR spectral data, the thermooxidative resistance ranking of DER 332 epoxy resin polymerized with the following is p-toluenesulfonamide > 4,4'-diaminodiphenyl sulfone or sulfanilamide > methylenedianiline » triethylenetetramine > 2,5-dimethyl-2,5-diaminohexane. Oxidation of aliphatic amine-cured DER 332 epoxy resin is initiated by electrophilic attack of O on the lone-pair electrons of the N to form an amine oxide. Polymer chain cleavage then occurs via Cope reactions. A newly proposed oxidative degradation pathway is described wherein the hydroxylamine products of Cope reactions are further oxidized to nitrones, which then decompose to amides via oxaziridine intermediates. Com. antioxidants added to an aliphatic amine-cured epoxy resin were ineffective, supporting the conclusion that the predominant degradation mechanism is not free radical in nature.

IT 148030-48-2

RL: PRP (Properties)

(thermooxidative stability and degradation mechanism of)

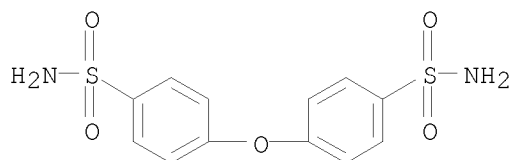
RN 148030-48-2 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 7566-41-8

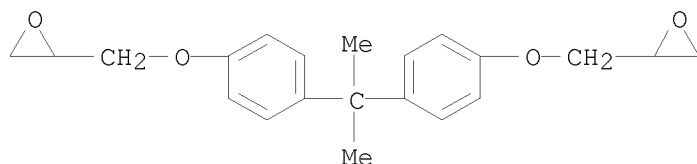
CMF C12 H12 N2 O5 S2



CM 2

CRN 1675-54-3

CMF C21 H24 O4



L13 ANSWER 40 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1993:104077 CAPLUS

DOCUMENT NUMBER: 118:104077

ORIGINAL REFERENCE NO.: 118:18211a,18214a

10/923,271

TITLE: Manufacture of unsaturated vinyl group-containing compound foams
INVENTOR(S): Ikezawa, Hideo; Matsubayashi, Katsuaki
PATENT ASSIGNEE(S): Oji Paper Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 04147859	A	19920521	JP 1990-270410	19901011 <--
JP 3011749	B2	20000221		

PRIORITY APPLN. INFO.: JP 1990-270410 19901011

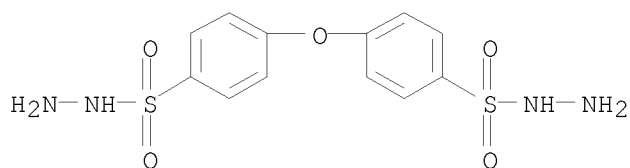
AB Title foams, with good homogeneous and smooth surface, are prepared by applying electron beam curable mixture of unsatd. vinyl group-containing compds.
and foaming agents on polyester films, irradiating, and foaming. Thus, applying 90:10 2-hydroxy-3-phenoxypropyl acrylate-Beamset 50 OB (urethane-acrylate) mixture containing 5 phr

p,p'-oxybis(benzenesulfonylhydrazid e) and urea 5 phr on polyester film, irradiating at 175 kV and 8 Mrad, and foaming at 130°, had smoothness (JIS P-8119) 70 s.

IT 80-51-3
RL: USES (Uses)
(blowing agents, urethane/acrylate-containing, irradiation of, for smooth foams)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



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L13 ANSWER 41 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:614108 CAPLUS
DOCUMENT NUMBER: 117:214108
ORIGINAL REFERENCE NO.: 117:36995a,36998a
TITLE: Manufacture of thin foams
INVENTOR(S): Ikezawa, Hideo; Matsubayashi, Katsuaki
PATENT ASSIGNEE(S): Oji Seishi K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

10/923,271

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04108576	A	19920409	JP 1990-226704	19900830 <--
JP 2944170	B2	19990830		

PRIORITY APPLN. INFO.: JP 1990-226704 19900830

AB The title foams with smooth surface and fine closed cell structure are manufactured by coating substrates with a composition containing ≥ 1 compound having

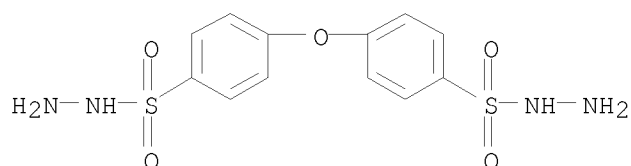
≥ 1 electron beam-curing ethylenically unsatd. group and thermal blowing agents, covering the coated layer with polyester films, curing by electron beam irradiation through the film, removing the film, and heating to expand the coated layer. Thus, coating a pigment-coated paper with a composition containing 2-hydroxy-3-phenoxypropyl acrylate 90, Beamset 550B (trifunctional urethane acrylate oligomer) 10, 4,4'-oxybis(benzenesulfonyl hydrazide) 5, and urea 5 parts, laminating Lumirror film on top, irradiating with an electron beam at 8 Mrad, removing the film, and heating at 130° for 3 min gave a foam with fine closed cell structure and smooth surface.

IT 80-51-3, p,p'-Oxybis(benzenesulfonyl hydrazide)
RL: USES (Uses)

(blowing agent, for vinyl polymer foams)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 42 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:573053 CAPLUS

DOCUMENT NUMBER: 117:173053

ORIGINAL REFERENCE NO.: 117:29925a,29928a

TITLE: Manufacture of highly crosslinked polyolefin foam products

INVENTOR(S): Maeda, Kazunori; Miyata, Hiroyuki; Takahashi, Susumu; Niwa, Toshio

PATENT ASSIGNEE(S): Fujikura Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04114041	A	19920415	JP 1990-234068	19900904 <--

PRIORITY APPLN. INFO.:

JP 1990-234068

19900904

AB The title process involves UV irradiation of a molding from crystalline polyolefin

and blowing agent at a temperature higher than the crystallization m.p. of the polyolefin. Extruding a mixture of polyethylene (m.p. 110°) 100, p,p'-oxybisbenzenesulfonyl hydrazide 60, 4-chlorobenzophenone 1, triallylisocyanurate 1, and tetrakis[methylene-3-(3'5'-di-tert-butyl-4'-hydroxyphenyl)propionato]methane 0.1 part at 120° through a T die, subjecting to UV irradiation at 120° and 300-400 nm for 30 s, and heating 15 min at 150° gave a sheet with gel ratio in the surface and core layers 80 and 75%, resp.

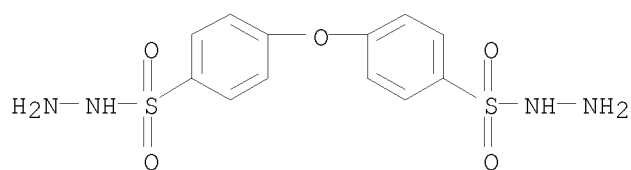
IT 80-51-3, p,p'-Oxy-bis-benzene-sulfonyl hydrazide

RL: USES (Uses)

(blowing agent, in manufacture of highly crosslinked polyolefin products)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 43 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:572815 CAPLUS

DOCUMENT NUMBER: 117:172815

ORIGINAL REFERENCE NO.: 117:29893a,29896a

TITLE: Manufacture of acrylic polyurethane foams

INVENTOR(S): Ikezawa, Hideo; Matsubayashi, Katsuaki; Miyata, Keiko

PATENT ASSIGNEE(S): Oji Seishi K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04087669	A	19920319	JP 1990-202507	19900801 <--
JP 2944160	B2	19990830		

PRIORITY APPLN. INFO.: JP 1990-202507 19900801

AB Foams are manufactured by coating compns. containing 100 parts mixture of 70-98%

monomers containing ≥50% p-RC₆H₄O(ZO)_nCOCH:CH₂ (R = H, alkyl; Z = C₁-10 alkylene, optionally bearing an OH or halogen group; n = 1-10) and 2-30% urethane acrylate oligomers (mol. weight 1000-6000), and 2-30 parts

O(C₆H₄SO₂NHNH₂-p)₂ (I) blowing agent on substrates, irradiating with electron beams, and heating above the decomposition temperature of I. Thus, a composition

of (nonylphenoxy)ethyl acrylate 80, urethane diacrylate (mol. weight 2000) 20, I 5, and urea 10 parts was coated (80 g/m²) on 100-μm coated paper,

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irradiated with 6 MRad electron beams, and heated at 130° for 3 min to give a foam with uniform closed cells (2.5-fold expansion)..

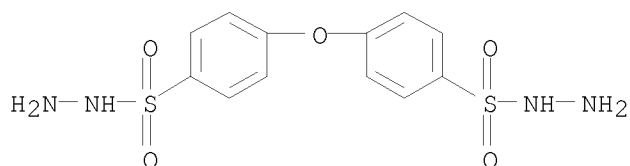
IT 80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide)

RL: USES (Uses)

(blowing agent, for acrylic polyurethane foams)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 44 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:135528 CAPLUS

DOCUMENT NUMBER: 116:135528

ORIGINAL REFERENCE NO.: 116:22789a,22792a

TITLE: Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative

CORPORATE SOURCE: United States Dept. of Transportation, Washington, DC, 20590-0001, USA

SOURCE: Federal Register (1990), 55(246), 52402-729, 21 Dec 1990

CODEN: FEREAC; ISSN: 0097-6326

DOCUMENT TYPE: Journal

LANGUAGE: English

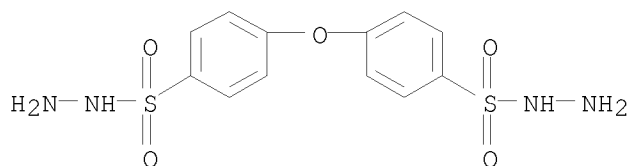
AB The hazardous materials regulations under the Federal Hazardous Materials Transportation Act are revised based on the United Nations recommendations on the transport of dangerous goods. The regulations cover the classification of materials, packaging requirements, and package marking, labeling, and shipping documentation, as well as transportation modes and handling, and incident reporting. Performance-oriented stds. are adopted for packaging for bulk and nonbulk transportation, and SI units of measurement generally replace US customary units. Hazardous material descriptions and proper shipping names are tabulated together with hazard class, identification nos., packing group, label required, special provisions, packaging authorizations, quantity limitations, and vessel stowage requirements.

IT 80-51-3, Diphenyloxide-4,4'-disulfohydrazide

RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process) (packaging and transport of, stds. for)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 45 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:112682 CAPLUS

DOCUMENT NUMBER: 116:112682

ORIGINAL REFERENCE NO.: 116:18931a,18934a

TITLE: Analysis of differential scanning calorimetric data for reactive chemicals

AUTHOR(S): Ando, T.; Fujimoto, Y.; Morisaki, S.

CORPORATE SOURCE: Res. Inst. Ind. Saf., Minist. Labour, Kiyose, Japan

SOURCE: Journal of Hazardous Materials (1991), 28(3), 251-80

CODEN: JHMAD9; ISSN: 0304-3894

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Results of DSC measurements of reactive chems. are presented. Exothermic onset temps. (To) and heats of decomposition (Q) for chems. were analyzed to see if it is possible to classify thermal hazards based on the factors. The values of the 2 factors, which were widely and uniformly distributed, were independent of each other, based on statistical considerations. It is possible to classify and to predict the thermal hazards of reactive chems. by 2-dimensional representation in terms of To and Q. The reactive chems. were classified into 28 types according to the functional groups. The effects of sample cell type (pinhole cell and sealed cell) and cell material on DSC results are outlined.

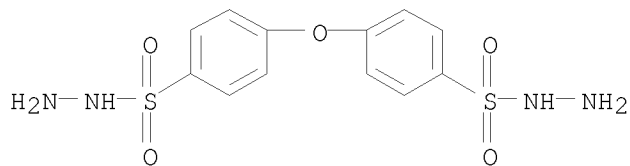
IT 80-51-3

RL: PRP (Properties)

(thermal hazard of, estimation of, DSC in)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 46 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:51575 CAPLUS

DOCUMENT NUMBER: 116:51575

ORIGINAL REFERENCE NO.: 116:8750h,8751a

TITLE: Glycated protein-decomposing preparations containing hydrazine derivatives and/or their salts

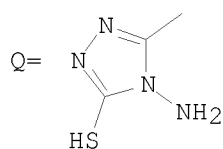
INVENTOR(S): Kurozumi, Masao; Komatsu, Makoto; Kajiwara, Hiroyoshi

PATENT ASSIGNEE(S): Otsuka Pharmaceutical Co., Ltd., Japan

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SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03148220	A	19910625	JP 1989-286633	19891102 <--
PRIORITY APPLN. INFO.:			JP 1989-286633	19891102
OTHER SOURCE(S):	MARPAT	116:51575		
GI				



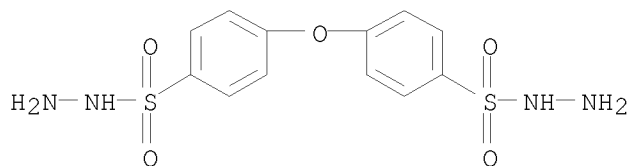
AB Glycated protein-decomposing prepns. contain ≥ 1 hydrazine derivs. of RNHNH₂ [R = Q, phenylsulfonyl group which may contain carboxyl group or hydrazinosulfonyl group on the Ph ring, pyridylcarbonyl group, C(SCH₃):NH, NH:CNHNH₂ or phthalazine group which may contain hydrazino group on the phthalazine ring] and their salts as active ingredients, which are useful for treatment of diabetic complications and hyperlipemia.
1-Hydrazinophthalazine (I) 150, Avicel 40, cornstarch 30, and Mg stearate 2 g were mixed to give tablets, which were coated with a mixture of hydroxypropyl Me cellulose 10, polyethylene glycol-6000 3, castor oil 40, and MeOH 40 g to give film-coated tablets. I showed min. decomposition concentration of amadori compds. in plasma proteins of $1.5 + 10^{-6}$ M and decomposition rate of human Hb A_{1c} of 33%.

IT 80-51-3

RL: BIOL (Biological study)
(glycated protein-decomposing prepns. containing)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 47 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:8520 CAPLUS

DOCUMENT NUMBER: 116:8520

ORIGINAL REFERENCE NO.: 116:1603a,1606a

TITLE: Heat-expandable beads as burning rate accelerators

10/923,271

INVENTOR(S): Sayles, David C.
PATENT ASSIGNEE(S): United States Dept. of the Army, USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5053088	A	19911001	US 1982-375892	19820505 <--

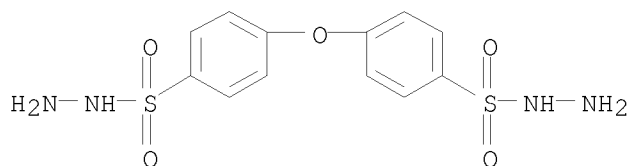
PRIORITY APPLN. INFO.: US 1982-375892 19820505

AB Burning rate of solid propellants are mech. enhanced by the incorporation of heat-expandable beads, e.g., styrene beads, into the propellant mixture. The flame front reaches an individual bead and the bead which contains an expanding or blowing agent expands to several times its volume and ruptures. Bead expansion or rupture causes a disruption of the propellant surface, and the flame can penetrate into the propellant. This penetration results in a major increase in burning rate.

IT 80-51-3, Celogen OT
RL: USES (Uses)
(blowing agent, propellant containing, heat-expanded beads in, for enhancement of burning rate)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 48 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:191604 CAPLUS

DOCUMENT NUMBER: 114:191604

ORIGINAL REFERENCE NO.: 114:32209a,32212a

TITLE: Twenty-seventh report of the interagency testing committee to the administrator; receipt of report and request for comments regarding priority list of chemicals

CORPORATE SOURCE: United States Environmental Protection Agency, Washington, DC, 20460, USA

SOURCE: Federal Register (1991), 56(44), 9534-72, 6 Mar 1991
CODEN: FEREAC; ISSN: 0097-6326

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The testing of the following compds. and groups of compds. for chemical fate, health effects, and/or ecol. effects is recommended, under the Federal Toxic Substances Control Act: 4-vinylcyclohexane, NaCN, acrylic acid, acetophenone, PhOH, N,N-dimethylaniline, EtOAc, 2,6- and

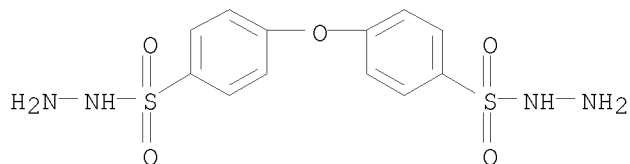
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3,4-dimethylphenol, 2,4-dinitrophenol, N-phenyl-1-naphthylamine, the group aldehydes (consisting of 89 compds.), the group sulfones (consisting of 26 compds.), and an addnl. group of 35 compds. that are produced in substantial quantities and are in need of subchronic toxicity data.

IT 80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide)
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(toxicity of, evaluation of, stds. for)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 49 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:592758 CAPLUS

DOCUMENT NUMBER: 113:192758

ORIGINAL REFERENCE NO.: 113:32639a,32642a

TITLE: Increasing the effect of blowing agents for plastics

INVENTOR(S): Andriska, Viktor; Andriska, Tunde; Szerecz, Janos; Szerecz, Janos, Mrs.

PATENT ASSIGNEE(S): Hung.

SOURCE: Hung. Teljes, 14 pp.
CODEN: HUXXB

DOCUMENT TYPE: Patent

LANGUAGE: Hungarian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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HU 51310	A2	19900428	HU 1988-5095	19880930 <--

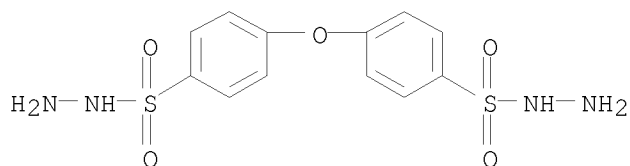
PRIORITY APPLN. INFO.: HU 1988-5095 19880930

AB The dispersibility and activity of blowing agents in plastics are increased by adsorbing salts of metals, such as Mg, Zn, Al, Ba, Cr, Ni, and Ca, onto the surface of the agents in the presence of anionic surfactants. Adding 100 g 0.1 M ammonium Bu maleate and 100 g AIBN to 800 g water at 60°, stirring 15 min, adding 50 g 0.1 M ZnSO₄ solution at 60°, stirring 15 min, centrifuging, and drying the precipitate at 105° gave 114 g product.

IT 80-51-3
RL: USES (Uses)
(blowing agents, inorg.-salt treatment of, for improved dispersibility and activity in plastics)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 50 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:535230 CAPLUS

DOCUMENT NUMBER: 113:135230

ORIGINAL REFERENCE NO.: 113:22957a,22960a

TITLE: Gas-generated expandable beads as burning rate accelerators

INVENTOR(S): Sayles, David C.

PATENT ASSIGNEE(S): United States Dept. of the Army, USA

SOURCE: U.S., 4 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4941931	A	19900717	US 1983-528198	19830826 <--

PRIORITY APPLN. INFO.: US 1983-528198 19830826

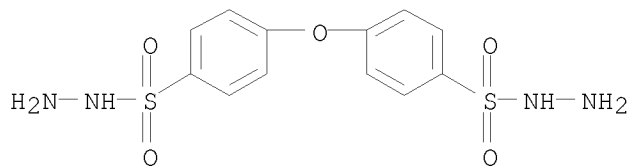
AB Gas-generated-expandable beads comprised of a blowing agent selected from 4-toluenesulfonyl hydrazide and 4,4'-oxybis(benzenesulfonyl hydrazide) which is coated with bead forming material consisting of OH-terminated polybutadiene prepolymer .apprx.95, trimethylolpropane .apprx.5, and isophorone diisocyanate .apprx.6 part are phys. dispersed in composite propellant composition The propellant composition consists of Al powder 12, NH4ClO4 (70 μ m) 73, n-hexylcarborane 6, OH-terminated polybutadiene prepolymer 6, trimethylolpropane 0.06, wetting agent 0.3, and isophorone diisocyanate 0.70 weight%. The burning rate of the propellants is improved with using only small amount of carborane. An increase in propellant d. and an improvement in mech. properties are achieved as a result of the beads being chemical crosslinked during propellant curing after being first phys. dispersed in the propellant composition during mixing.

IT 80-51-3, Celogen OT

RL: USES (Uses)
(blowing agent, expandable beads containing, in propellants, with improved burning rate)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 51 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:546282 CAPLUS

DOCUMENT NUMBER: 111:146282

ORIGINAL REFERENCE NO.: 111:24229a,24232a

TITLE: Inhibition of carbonic anhydrase by substituted benzenesulfonamides. A reinvestigation by QSAR and molecular graphics analysis

AUTHOR(S): Carotti, Angelo; Raguseo, Cosima; Campagna, Francesco; Langridge, Robert; Klein, Teri E.

CORPORATE SOURCE: Dip. Farm.-Chim., Univ. Bari, Bari, 70126, Italy

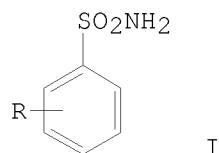
SOURCE: Quantitative Structure-Activity Relationships (1989), 8(1), 1-10

CODEN: QSARDI; ISSN: 0931-8771

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The inhibition of bovine carbonic anhydrase B by an appropriately designed set of m- and p-substituted benzenesulfonamides (I, R = H, halo, alkoxy, aryl, etc.) was studied. From the results the following quant. structure-activity relationship was derived: $\log 1/K_i = 0.95\sigma + 0.54\pi - 0.35B_{5,3} + 6.29$. In this equation K_i is the inhibition constant, σ is the Hammett constant, π is the hydrophobic parameter and $B_{5,3}$ is the sterimol steric parameter for the m-substituents. Using this equation, a new congener was designed and synthesized and the K_i for a new congener intended to maximize the inhibitory potency ($1/K_i$) was predicted. The interactions involved in the enzyme-inhibitors binding as suggested by the correlation equation, have been tentatively interpreted using computer built 3-D mol. models based on the published X-ray crystallog. coordinates of the free and inhibitor-bound carbonic anhydrase. The results from our analyses have been compared with those obtained in some previous QSAR analyses.

IT 7566-41-8

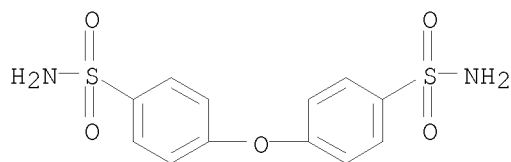
RL: BIOL (Biological study)

(carbonic anhydrase inhibition by, structure in relation to)

RN 7566-41-8 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis- (CA INDEX NAME)

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L13 ANSWER 52 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1989:116025 CAPLUS

DOCUMENT NUMBER: 110:116025

ORIGINAL REFERENCE NO.: 110:19145a,19148a

TITLE: Expandable vinyl chloride polymer compositions with improved plate-out resistance

INVENTOR(S): Aoki, Toshihiro; Iida, Yoshio; Shimoyama, Noriyuki

PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

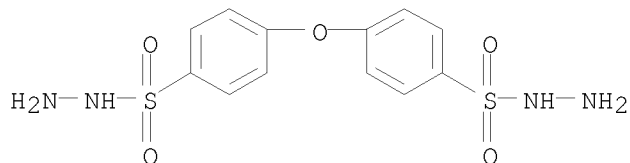
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
	JP 63179939	A	19880723	JP 1987-10354	19870120 <--
PRIORITY APPLN. INFO.:				JP 1987-10354	19870120
AB	The title comps. contain fillers 50-250, plasticizers 30-100, polyesters of hydroxycarboxylic acids 0.01-5, and heat-decomposable organic blowing agents 0.05-10 phr. A paste containing Geon 45 (PVC) 100, DOP 60, CaCO ₃ 200, TiO ₂ 20, Na-Zn liquid stabilizer 3, azodicarbonamide 2, mineral spirit 10, and poly(12-hydroxystearic acid) 0.5 part was coated (0.18 mm) on flame-retardant paper, cured 1 min at 140°, and heated 30-90 s at 220° to give a foam with good cell structure. When the semi-cured material was contacted with a Cr-plated surface, good plate-out resistance was observed				
IT	80-51-3, p,p'-Oxybis(benzenesulfonylhydrazide) RL: USES (Uses) (blowing agents, PVC containing, with plate-out resistance)				
RN	80-51-3 CAPLUS				
CN	Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)				

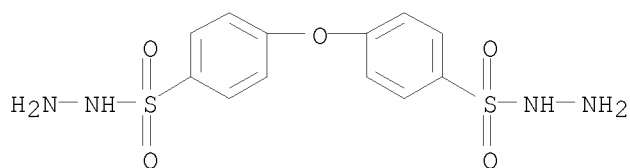


L13 ANSWER 53 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:450040 CAPLUS

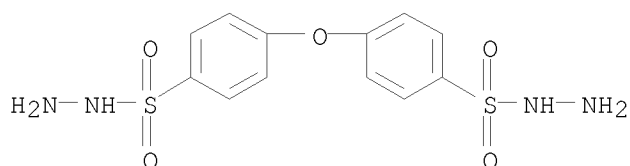
DOCUMENT NUMBER: 109:50040

ORIGINAL REFERENCE NO.: 109:8339a,8342a
 TITLE: Genotoxicity of a variety of hydrazine derivatives in the hepatocyte primary culture/DNA repair test using rat and mouse hepatocytes
 AUTHOR(S): Mori, Hideki; Sugie, Shigeyuki; Yoshimi, Naoki; Iwata, Hitoshi; Nishikawa, Akiyoshi; Matsukubo, Kogen; Shimizu, Hidesuke; Hirono, Iwao
 CORPORATE SOURCE: Sch. Med., Gifu Univ., Gifu, 500, Japan
 SOURCE: Japanese Journal of Cancer Research (1988), 79(2), 204-11
 CODEN: JJCREP; ISSN: 0910-5050
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The genotoxicity of a variety of hydrazine derivs. was examined in the DNA-repair test on rat or mouse hepatocytes. Out of 32 hydrazine derivs., 6 chems., i.e., N'-acetyl-4-(hydroxymethyl)phenylhydrazine, 1,2-dimethylhydrazine-2HCl, 1-hydrazinophthalazine-HCl, methylhydrazine sulfate, p,p'-oxybisbenzene disulfonylhydrazide and phenylhydrazine-HCl, elicited pos. DNA repair responses in the test on rat hepatocytes. In the test on mouse hepatocytes, 4 more hydrazine derivs., i.e., 1,1-dimethylhydrazine, hydrazine hydrate, hydrazine sulfate and 2-methyl-4-chlorophenoxyacetic acid hydrazide-HCl also generated pos. responses, in addition to the 6 pos. compds. in the rat assay. Apparently the mouse hepatocytes are more susceptible to the genotoxicity of hydrazine derivs., and the species differences in genotoxicity appear to be in agreement with the in vivo carcinogenicity of these agents.
 IT 80-51-3
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (genotoxicity of, by DNA repair test, species difference in)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 54 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1988:430188 CAPLUS
 DOCUMENT NUMBER: 109:30188
 ORIGINAL REFERENCE NO.: 109:4995a,4998a
 TITLE: Color developer for thermal printing material
 INVENTOR(S): Kurisu, Tokuo; Motosugi, Yukinori; Kobayashi, Hiroaki
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	JP 62294590	A	19871222	JP 1986-137703	19860613 <--
PRIORITY APPLN. INFO.:				JP 1986-137703	19860613
AB	A color developer for nonimpact thermal printing material provides images with improved dependability and reduced coloring on the background. The color developer is selected from p-toluenesulfonylhydrazide and p, p'-hydroxybis(benzenesulfonylhydrazide).				
IT	80-51-3				
	RL: USES (Uses)				
	(leuco dye developer, for nonimpact thermal printing materials)				
RN	80-51-3 CAPLUS				
CN	Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)				



L13 ANSWER 55 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:402112 CAPLUS

DOCUMENT NUMBER: 109:2112

ORIGINAL REFERENCE NO.: 109:407a,410a

TITLE: Evaluation of chemical genotoxicity by a series of short-term tests

AUTHOR(S): Hachiya, Noriyuki

CORPORATE SOURCE: Sch. Med., Akita Univ., Akita, Japan

SOURCE: Akita Igaku (1987), 14(2), 269-92

CODEN: AKIGDV; ISSN: 0386-6106

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

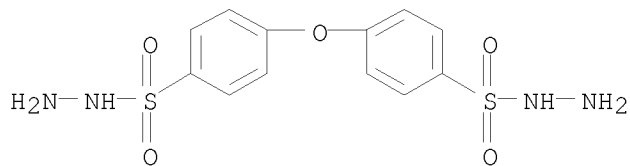
AB To evaluate chemical genotoxicity, 82 substances were subjected to a battery of short-term assays. Tested materials include 64 chems. used in plastic industries, and 16 natural products which are currently used as food additives in Japan. The ability to induce micronuclei in mouse bone marrow was examined for 26 materials.

IT 80-51-3, 4,4'-Oxybis(benzenesulfonylhydrazide)

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (genotoxicity of, in short-term tests)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



10/923,271

L13 ANSWER 56 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:461952 CAPLUS
DOCUMENT NUMBER: 105:61952
ORIGINAL REFERENCE NO.: 105:10123a,10126a
TITLE: Foamed sheets
INVENTOR(S): Sogabe, Yoji; Harada, Kunihiro; Uchida, Katsumi
PATENT ASSIGNEE(S): Achilles Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

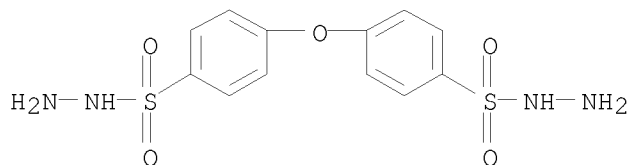
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 61055127	A	19860319	JP 1984-177195	19840825 <--
PRIORITY APPLN. INFO.:			JP 1984-177195	19840825

AB Foamed sheets, useful as shoe cushioning and instep covering materials, packings, and bags, are manufactured from compns. comprising polyols, urethane catalysts, decomposable organic blowing agents, and polyisocyanates. Thus, poly(tetramethylene ether) glycol (OH value 54 KOH mg/g), TiO₂, 1,4-butanediol, BHT antioxidant, Tinuvin 328 UV absorber, dioctyl phthalate, N,N'-dinitrosopentamethylenetetramine, urea, phthalic anhydride, and dibutyltin dilaurate were uniformly mixed and kneaded to form a composition, which was extruded with a polyisocyanate prepolymer (prepared from a triol and MDI) and continuously foam-cured at 150° on a chloroprene size-treated nylon taffeta to give a foamed sheet having 2.5 expansion ratio.

IT 80-51-3
RL: USES (Uses)
(blowing agents, for polyurethane foams)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 57 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1985:561943 CAPLUS
DOCUMENT NUMBER: 103:161943
ORIGINAL REFERENCE NO.: 103:26007a,26010a
TITLE: Fire-resistant and thermally insulating compositions
PATENT ASSIGNEE(S): Fujikura Cable Works, Ltd., Japan; Fujikura Kasei Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

10/923,271

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60077157	A	19850501	JP 1983-183202	19831003 <--
JP 05075718	B	19931021		

PRIORITY APPLN. INFO.: JP 1983-183202 19831003

AB The title material consists of organic binder 100, low-temperature foaming agent

(decomposition temperature 100-210°) 70-200, low-temperature carbonizing agent (m.p.

20° lower than the decomposition temperature of the foaming agent or below) 20-70, and filler 150-350 parts. The material is especially effective for protecting flammable materials and metals from fire. Thus, water 21, a poly(Na carboxylate) 0.3, hydroxyethyl cellulose 0.4, 2-ethylhexyl acrylate-Me methacrylate-styrene copolymer [25750-06-5] emulsion 25, trichloroethyl phosphate [115-96-8] 3, D-sorbitol [50-70-4] 4.4, dinitrosopentamethylenetetramine [101-25-7] 12.5, Al(OH)₃ 29, Bu Carbitol 1, and glass chopped strands 4 parts were mixed to obtain the title material, which was coated (1 mm thick) on a blasted steel plate and heated to 300° (surface temperature) for 60 min by radiant heat. The coating expanded 300% and the steel surface temperature was only 176°.

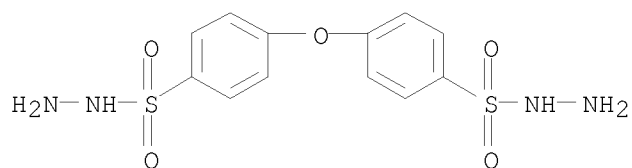
IT 80-51-3

RL: USES (Uses)

(blowing agent, acrylic coatings containing filler and, for fire protection and heat insulation)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 58 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1985:168020 CAPLUS

DOCUMENT NUMBER: 102:168020

ORIGINAL REFERENCE NO.: 102:26437a,26440a

TITLE: Unsaturated polyester resin foams

PATENT ASSIGNEE(S): Eiwa Chemical Industrial Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

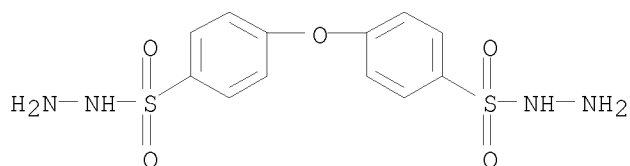
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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10/923,271

JP 59230037 A 19841224 JP 1983-104824 19830610 <--
JP 03011302 B 19910215
PRIORITY APPLN. INFO.: JP 1983-104824 19830610
AB An aliphatic acid containing an OH group is added to an unsatd. polyester resin
 foaming composition containing inorg. particles of a percarbonate, a
perborate, and
 (or) a perphosphate, a hydrazide, and a cobalt compound The compns. have
 long gel time and foaming time without loss of foamability, uniformity and
 fineness of the foams. Thus, p,p'-oxybis(benzenesulfonyl hydrazide) [80-51-3]
 cobalt octanoate [6700-85-2], Na percarbonate, and Me Et
 ketone peroxide were added to a mixture of unsatd. polyester resin and
 lactic acid [50-21-5] and the mixture was gelled for 15 min. to give a foam
 (foaming ratio 4.2) with fine uniform pores.
IT 80-51-3
 RL: USES (Uses)
 (blowing agents, for polyesters)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 59 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:176195 CAPLUS
DOCUMENT NUMBER: 100:176195
ORIGINAL REFERENCE NO.: 100:26811a,26814a
TITLE: Stabilization of branched foamed polyethylene against
 heat oxidation
INVENTOR(S): Simunkova, Dagmar; Zelenak, Pavol; Rado, Rudolf; Gal,
 Egon
PATENT ASSIGNEE(S): Czech.
SOURCE: Czech., 4 pp.
 CODEN: CZXXA9
DOCUMENT TYPE: Patent
LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CS 205707	B1	19810529	CS 1979-836	19790207 <--
PRIORITY APPLN. INFO.:			CS 1979-836	A 19790207
AB Cellular branched polyethylene (I) [9002-88-4], which is stabilized against thermal oxidation and is suitable for use in high-frequency electrotechnol. and cable manufacture, is prepared by addition of 0.3-3% p,p'-oxybis(benzenesulfonyl hydrazide) (II) [80-51-3] blowing agent and 0.05-0.5% 2,2'-thiodiethyl bis[3-(3,5-di-tert-butyl-4- hydroxyphenyl)propionate (III) [41484-35-9], 4,4'-thiobis(6-tert-				

butyl-m-cresol) [96-69-5], or pentaerythritol tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] [6683-19-8] antioxidant to molten I. Thus, I melt (flow index 2.1 g/10 min, d. = 0.921 g/cm³, induction period of 0 absorption 0.1 h/200°) containing 1% II and 0.1% III and mixed for 5 min at 130° had induction period of 0 absorption 1.4 h/200° (5 min after II decomposition 5.2 h/160°) and bulk weight 0.552 g/cm³, compared with 0.9 h and 0.607 for a polymer not containing II.

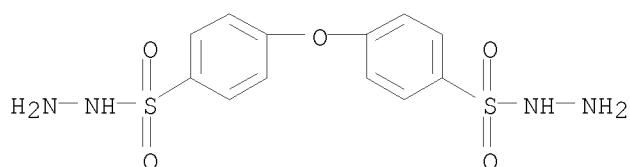
IT 80-51-3

RL: USES (Uses)

(blowing agents, containing phenolic antioxidants, for thermal oxidation-stabilized cellular polyethylene)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 60 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1983:144775 CAPLUS

DOCUMENT NUMBER: 98:144775

ORIGINAL REFERENCE NO.: 98:22073a,22076a

TITLE: Study of the decomposition of blowing agents in the presence of accelerators

AUTHOR(S): Khodakova, N. F.; Mishina, I. M.; Makogon, A. M.

CORPORATE SOURCE: Nauchno-Issled. Inst. Khim. Polim. Mater., Tambov, USSR

SOURCE: Kauchuk i Rezina (1983), (1), 17-19

CODEN: KCRZAE; ISSN: 0022-9466

DOCUMENT TYPE: Journal

LANGUAGE: Russian

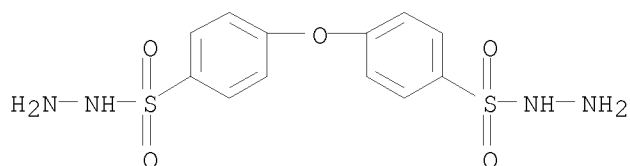
AB The decomposition of arylsulfonfyl hydrazides, e.g., p,p'-dihydroxydibenzenesulfonfyl hydrazide (Dihydrazide SDO) [80-51-3], benzenesulfonfyl hydrazide (Hydrazide BSG) (I) [80-17-1], N,N'-diisopropylidene-p,p'-dihydroxydibenzenesulfonfyl hydrazide (Dihydrazone SDO) [13279-35-1], and N-isopropylidenebenzenesulfonfyl hydrazide (Hydrazone BSG) [20532-11-0] in the presence of Captax (II) [149-30-4], urotropin (III) [100-97-0], Sulfenamide Ts (IV) [95-33-0], Thiuram D (V) [137-26-8], or dithiodimorpholine (VI) [103-34-4] at 25-30° was described. Of the 5 vulcanization accelerators studied, only II did not affect the decomposition of the blowing agents. The decomposition of the blowing agents proceeds in 2 stages, with the temperature of the first decomposition stage being

dependent on the type of the blowing agent and the nature of the accelerator. The lowest decomposition temperature was observed in a I-IV mixture The

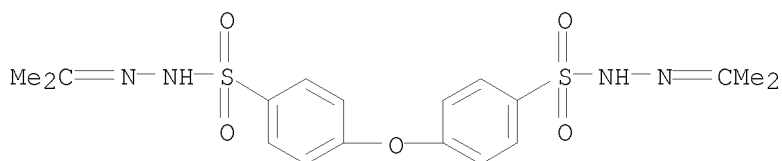
effect of the accelerators on the decomposition of the blowing agents decreased in the order: III > VI > IV > V. A decomposition mechanism for the blowing

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agents was proposed.
IT 80-51-3 13279-35-1
RL: USES (Uses)
(blowing agents, decomposition of, in presence of vulcanization
accelerators, mechanism of)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



RN 13279-35-1 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, bis[(1-methylethylidene)hydrazide]
(9CI) (CA INDEX NAME)



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L13 ANSWER 61 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:505088 CAPLUS

DOCUMENT NUMBER: 97:105088

ORIGINAL REFERENCE NO.: 97:17383a,17386a

TITLE: A collection of guinea pig sensitization test results
grouped by chemical class

AUTHOR(S): Rao, K. S.; Betso, J. E.; Olson, K. J.

CORPORATE SOURCE: Toxicol. Res. Lab., Dow Chem. U.S.A., Midland, MI,
48640, USA

SOURCE: Drug and Chemical Toxicology (1977) (1981),
4(4), 331-51

CODEN: DCTODJ; ISSN: 0148-0545

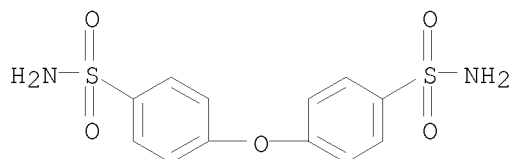
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Various chemical groups were evaluated for their skin sensitization potential in the guinea pig. In general, amines, acetanilides, pyridines, piperidines, and sulfones were pos. in the guinea pig test. Since these tests were done over a period of years, any further structural-related correlations or predictions should be made with caution due to variability of sample purity or differences in methodol. It is important to realize that every chemical which is pos. in the guinea pig should not be construed as definitive evidence of human skin sensitization.

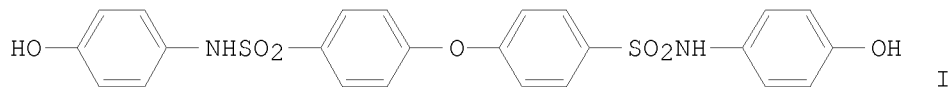
10/923,271

IT 7566-41-8
RL: BIOL (Biological study)
(skin sensitization response to)
RN 7566-41-8 CAPLUS
CN Benzenesulfonamide, 4,4'-oxybis- (CA INDEX NAME)



L13 ANSWER 62 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:52859 CAPLUS
DOCUMENT NUMBER: 96:52859
ORIGINAL REFERENCE NO.: 96:8723a,8726a
TITLE: Bisphenol compounds
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

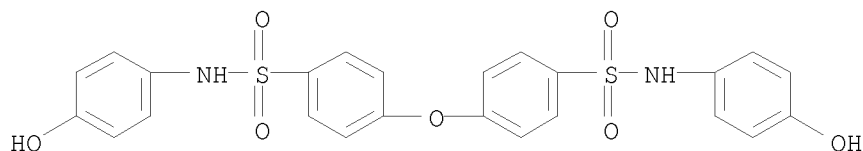
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56108759	A	19810828	JP 1980-8234	19800129 <--
PRIORITY APPLN. INFO.: GI			JP 1980-8234	A 19800129



AB Bisphenol disulfonamides (as potential monomers) were prepared from bis(benzotriazolyl sulfonates). Thus, 11.28 g bis(1-benzotriazolyl) diphenyl ether-4,4'-disulfonate [62470-48-8] was added to 4.36 g 4-H₂NC₆H₄OH [123-30-8] in pyridine with ice cooling over 20 min and the mixture stirred 24 h at room temperature to give 71% N,N'-bis(p-hydroxyphenyl)diphenyl ether-4,4'-disulfonamide (I) [51767-53-4]. Similarly prepared were N,N'-bis(m-hydroxyphenyl)diphenyl ether-4,4'-disulfonamide [76755-77-6] and N,N'-bis(p-hydroxyphenyl)benzene-m-disulfonamide [17177-36-5].
IT 51767-53-4P 76755-77-6P
RL: PREP (Preparation)
(preparation of)
RN 51767-53-4 CAPLUS

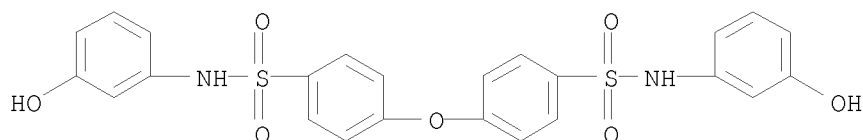
10/923,271

CN Benzenesulfonamide, 4,4'-oxybis[N-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 76755-77-6 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis[N-(3-hydroxyphenyl)- (CA INDEX NAME)



L13 ANSWER 63 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:7261 CAPLUS

DOCUMENT NUMBER: 96:7261

ORIGINAL REFERENCE NO.: 96:1329a,1332a

TITLE: Sulfonamide group-containing aromatic polyesters

PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
JP 56104941	A	19810821	JP 1980-6766	19800125 <--
PRIORITY APPLN. INFO.:			JP 1980-6766	A 19800125

AB Sulfonamide group-containing bisphenols and aromatic bis(chloroformyl) compds. are polymerized to give copolymers having good mech. properties and heat resistance. Thus, 0.207 g terephthaloyl dichloride in 10 mL CHCl₃ was added to a strongly stirred mixture of 0.512 g bis[4-(4-hydroxyphenyl)sulfomoyl]phenyl ether, 10 mL 0.2N NaOH solution, and 20 mL H₂O at 0° to give 0.577 g copolymer [76755-75-4] having reduced viscosity (30°, 0.5 g/dL Me₂NAC) 0.80 and thermogravimetric initial weight loss temperature ≥290° and 5% weight loss temperature 300°.

IT 76755-75-4P 76755-88-9P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, heat-resistant)

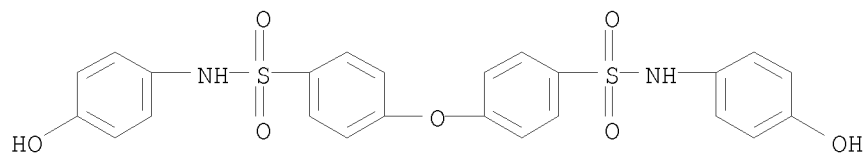
RN 76755-75-4 CAPLUS

CN 1,4-Benzenedicarbonyl dichloride, polymer with 4,4'-oxybis[N-(4-hydroxyphenyl)benzenesulfonamide] (9CI) (CA INDEX NAME)

CM 1

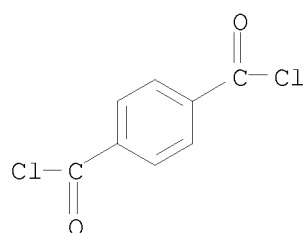
10/923,271

CRN 51767-53-4
CMF C24 H20 N2 O7 S2



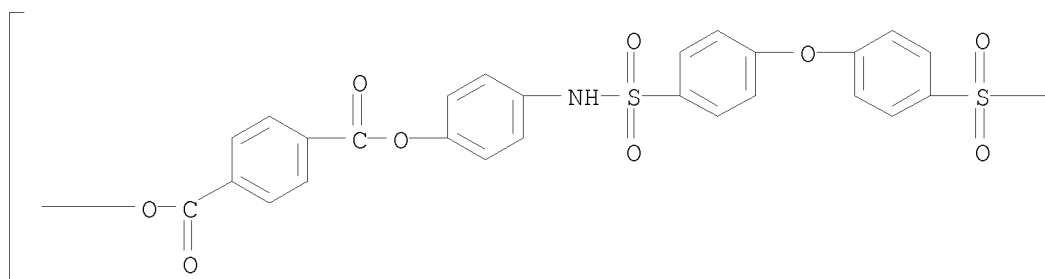
CM 2

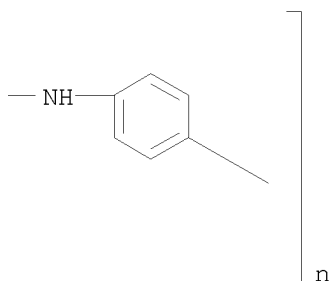
CRN 100-20-9
CMF C8 H4 Cl2 O2



RN 76755-88-9 CAPLUS
CN Poly(oxycarbonyl-1,4-phenylenecarbonyloxy-1,4-phenyleneiminosulfonyl-1,4-phenyleneoxy-1,4-phenylenesulfonylimino-1,4-phenylene) (9CI) (CA INDEX NAME)

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L13 ANSWER 64 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:133751 CAPLUS

DOCUMENT NUMBER: 90:133751

ORIGINAL REFERENCE NO.: 90:21119a,21122a

TITLE: Relations between the mutagenic and carcinogenic effects of hydrazine derivatives

AUTHOR(S): Shimizu, Hidesuke; Hayashi, Kazuo; Takemura, Nozomi

CORPORATE SOURCE: Dep. Public Health, Jikei Univ. Sch. Med., Tokyo, Japan

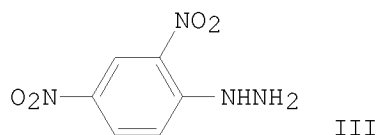
SOURCE: Nippon Eiseigaku Zasshi (1978), 33(3), 474-85

CODEN: NEZAAQ; ISSN: 0021-5082

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

GI



AB The mutagenicity of hydrazine compds. was tested with Salmonella typhimurium TA98, TA100, and TA1537 in the presence or absence of S-9 Mix. Five carcinogenic compds., 2-hydroxyethylhydrazine [109-84-2], butylhydrazine oxalate [3530-11-8], phenylhydrazine-HCl (I) [59-88-1], β -phenylethylhydrazine sulfate [156-51-4], and p-tolylhydrazine-HCl (II) [637-60-5], were mutagenic to TA100 with and without S-9 Mix, whereas hydrazine hydrate [7803-57-8] and hydrazine sulfate [10034-93-2] were mutagenic to TA100 only in the presence of S-9 Mix. The carcinogens 2,4-dinitrophenylhydrazine (III) [119-26-6] and p,p'-oxybisbenzenedisulfonylhydrazide [80-51-3] were mutagenic to TA100 with and without S-9 Mix. I, II, and III were mutagenic to TA1537 with and without S-9 Mix. I and II were mutagenic to TA98 with S-9 Mix, whereas III showed mutagenic activity to TA98 with and without S-9 Mix.

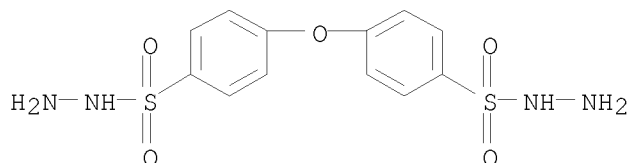
IT 80-51-3

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (carcinogenicity and mutagenicity of)

10/923,271

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 65 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1977:171879 CAPLUS

DOCUMENT NUMBER: 86:171879

ORIGINAL REFERENCE NO.: 86:27019a,27022a

TITLE: A novel synthesis of aromatic polysulfonamides from active di-1-benzotriazolyl disulfonate and aromatic diamine under mild conditions

AUTHOR(S): Imai, Yoshio; Ueda, Mitsuru; Iizawa, Takashi

CORPORATE SOURCE: Fac. Eng., Yamagata Univ., Yonezawa, Japan

SOURCE: Journal of Polymer Science, Polymer Letters Edition (1977), 15(4), 207-11

CODEN: JPYBAN; ISSN: 0360-6384

DOCUMENT TYPE: Journal

LANGUAGE: English

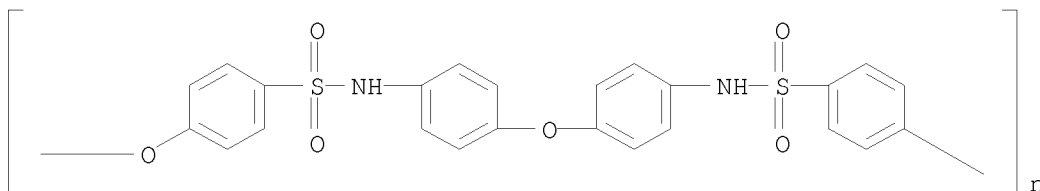
AB Di-1-benzotriazolyl 4,4'-oxydibenzenesulfonate [62470-48-8] was prepared and polymerized with bis(4-aminophenyl) ether in polar solvents in the presence of an acid acceptor to give a polysulfonamide (I) [62470-49-9] in 97-9% yield. By thermal anal., I began to decompose at 320°, with 10% weight loss at 360 and 380° in air and nitrogen, resp.

IT 62471-08-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 62471-08-3 CAPLUS

CN Poly(oxy-1,4-phenylenesulfonylimino-1,4-phenyleneoxy-1,4-phenyleneiminosulfonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



L13 ANSWER 66 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:479833 CAPLUS

DOCUMENT NUMBER: 85:79833

ORIGINAL REFERENCE NO.: 85:12831a

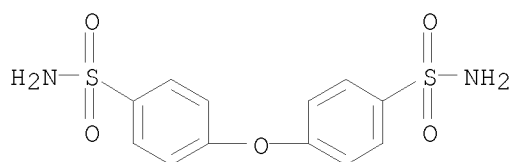
TITLE: Epoxy resin mixtures

PATENT ASSIGNEE(S): Dow Chemical Co., USA

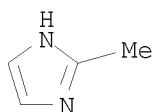
10/923,271

SOURCE: Neth. Appl., 12 pp.
CODEN: NAXXAN
DOCUMENT TYPE: Patent
LANGUAGE: Dutch
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	NL 7405890	A	19751104	NL 1974-5890	19740502 <--
PRIORITY APPLN. INFO.:				NL 1974-5890	A 19740502
AB	The title compns. containing an epoxy resin containing >1 epoxide group/mol., an				
	aromatic disulfonamide latent hardener, and a phosphonium salt, ammonium salt, alkyl metal hydroxide, or salt of an aromatic disulfonamide with a tertiary amine or phosphine as an accelerator, with the ratio of amine H to epoxy equivalent being 0.941. Thus, bisphenol A diglycidyl ether [1675-54-3] (epoxy equivalent weight 190) 69.8, diphenyl ether disulfonamide [7566-41-8] 30.2, 2-methylimidazole [693-98-1] 1.2, and 2-methoxyethanol 100 g were mixed, coated at a thickness of 12.7 microns on cold rolled steel, and cured 15 min at 177°, giving a coating which had no hot tact, passed a 180 kg-cm impact test, and with not affected by 3 min exposure to MeCOEt.				
IT	60043-59-6 60043-60-9 60043-61-0 60043-62-1 60043-63-2 60043-64-3				
	RL: CAT (Catalyst use); USES (Uses) (catalysts, for crosslinking of epoxy resin coatings)				
RN	60043-59-6	CAPLUS			
CN	Benzenesulfonamide, 4,4'-oxybis-, compd. with 2-methyl-1H-imidazole (1:1) (9CI) (CA INDEX NAME)				
CM	1				
CRN	7566-41-8				
CMF	C12 H12 N2 O5 S2				



CM 2
CRN 693-98-1
CMF C4 H6 N2

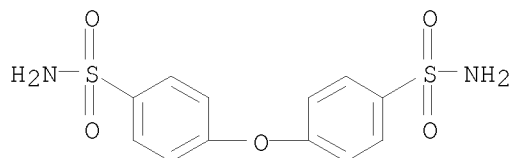


10/923,271

RN 60043-60-9 CAPLUS
CN Benzenesulfonamide, 4,4'-oxybis-, compd. with 2-methyl-1H-imidazole (4:1)
(9CI) (CA INDEX NAME)

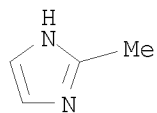
CM 1

CRN 7566-41-8
CMF C12 H12 N2 O5 S2



CM 2

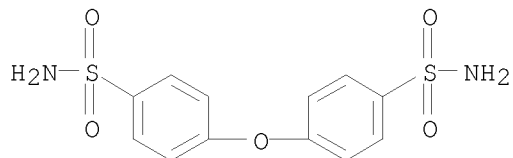
CRN 693-98-1
CMF C4 H6 N2



RN 60043-61-0 CAPLUS
CN Benzenesulfonamide, 4,4'-oxybis-, compd. with 1,4-diazabicyclo[2.2.2]octane (4:1) (9CI) (CA INDEX NAME)

CM 1

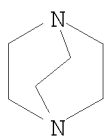
CRN 7566-41-8
CMF C12 H12 N2 O5 S2



CM 2

CRN 280-57-9
CMF C6 H12 N2

10/923,271



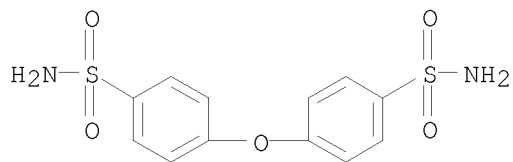
RN 60043-62-1 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis-, compd. with 2,2',2''-nitrilotris[ethanol] (7:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7566-41-8

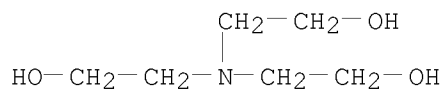
CMF C12 H12 N2 O5 S2



CM 2

CRN 102-71-6

CMF C6 H15 N O3



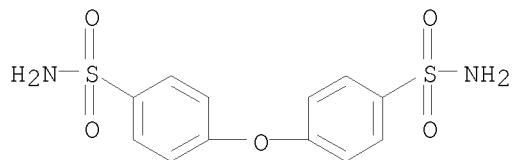
RN 60043-63-2 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis-, compd. with N,N-diethylethanamine (13:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7566-41-8

CMF C12 H12 N2 O5 S2

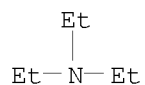


10/923,271

CM 2

CRN 121-44-8

CMF C6 H15 N



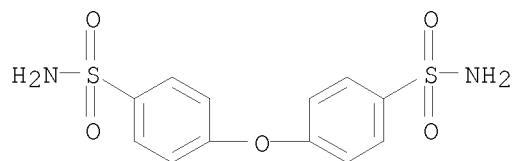
RN 60043-64-3 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis-, compd. with 1,3,5,7-tetraazatricyclo[3.3.1.1^{3,7}]decane (7:2) (9CI) (CA INDEX NAME)

CM 1

CRN 7566-41-8

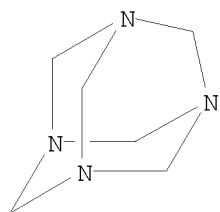
CMF C12 H12 N2 O5 S2



CM 2

CRN 100-97-0

CMF C6 H12 N4

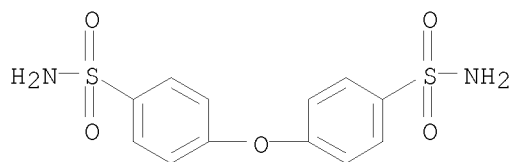


IT 7566-41-8

RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agents, for epoxy resin coatings)

RN 7566-41-8 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis- (CA INDEX NAME)



L13 ANSWER 67 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:592800 CAPLUS
 DOCUMENT NUMBER: 83:192800
 ORIGINAL REFERENCE NO.: 83:30301a,30304a
 TITLE: Sulfonyl semicarbazides
 INVENTOR(S): Hunter, Byron Alexander
 PATENT ASSIGNEE(S): Uniroyal, Inc., USA
 SOURCE: Ger. Offen., 24 pp.
 CODEN: GWXXBX

DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2505036	A1	19750807	DE 1975-2505036	19750206 <--
DE 2505036	B2	19760318		
DE 2505036	C3	19770120		
US 3903157	A	19750902	US 1974-440222	19740206 <--
CA 1043354	A1	19781128	CA 1974-206498	19740807 <--
ZA 7500268	A	19760128	ZA 1975-268	19750114 <--
AU 7577375	A	19760722	AU 1975-77375	19750116 <--
GB 1490811	A	19771102	GB 1975-3163	19750124 <--
BR 7500590	A	19751111	BR 1975-590	19750129 <--
NL 7501074	A	19750808	NL 1975-1074	19750130 <--
NL 181194	B	19870202		
NL 181194	C	19870701		
BE 825158	A1	19750804	BE 1975-153036	19750204 <--
JP 50108222	A	19750826	JP 1975-15242	19750205 <--
FR 2259821	A1	19750829	FR 1975-3596	19750205 <--

PRIORITY APPLN. INFO.: US 1974-440222 A 19740206

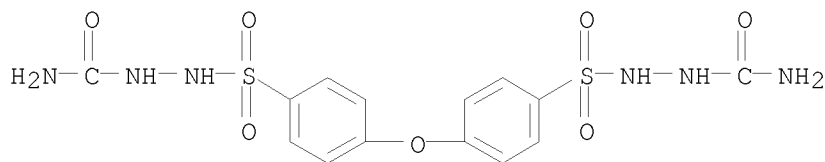
AB RSO₂NHNHCONH₂ (I; R = Ph, 4-MeC₆H₄, etc.) and Z(SO₂NHNHCONH₂)₂ (II; Z = phenylene, alkylene, oxydiphenylene, etc.) were prepared by the reaction of a metal or ammonium sulfinate with (H₂NCO)₂N₂ (III). Thus, 4-MeSO₂Na reacted with III in aqueous solution at 26-7° for 15 min to give 98% I (R = 4-MeC₆H₄). Reaction of m-C₆H₄(SO₂Na)₂ (IV) with III gave II (R = m-phenylene). IV was prepared by the reaction of m-C₆H₄(SO₂Cl)₂ with Na₂SO₃ and NaOH.

IT 10195-67-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 10195-67-2 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[2-(aminocarbonyl)hydrazide] (9CI)
 (CA INDEX NAME)



L13 ANSWER 68 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1975:565030 CAPLUS

DOCUMENT NUMBER: 83:165030

ORIGINAL REFERENCE NO.: 83:25905a,25908a

TITLE: Ammonioamidates and their use in modifying the properties of polymers

INVENTOR(S): Brooks, John Langshaw; Budziarek, Richard; Crook, James W.; Vickers, Edward J.

PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd., UK

SOURCE: Ger. Offen., 43 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2456824	A1	19750605	DE 1974-2456824	19741202 <--
US 3985793	A	19761012	US 1974-524948	19741118 <--
FR 2253010	A1	19750627	FR 1974-39207	19741129 <--
JP 50100020	A	19750808	JP 1974-137623	19741130 <--
US 4005097	A	19770125	US 1976-659636	19760220 <--
PRIORITY APPLN. INFO.:			GB 1973-55659	A 19731130
			US 1974-524948	A3 19741118

GI For diagram(s), see printed CA Issue.

AB The ammonioamidates R+N-CO₂ZO₂CN-R⁺ (23), with R⁺ = Me₃N⁺, pyridinio, 2,6-dimethylpyridinio, or 4-methylmorpholinio and Z = (4-C₆H₄)₂CMe₂, m-C₆H₄, 1,4-C₆H₄(OCH₂CH₂)₂, 1,4-C₆H₄(CO₂CH₂CH₂)₂, (CH₂)₆, CH₂CH₂(OCH₂CH₂)_n, or a similar group, and R+N-SO₂ZSO₂N-R⁺, with R⁺ = Me₃N⁺ or pyridinio and Z = (4-C₆H₄)₂O or (4-C₆H₄)₂CH₂, were prepared. The ammonioamidates were useful for modifying the properties of polymers, e.g., for improving the adhesion of an epoxy resin-phenolic resin adhesive to polyester tire cords and natural rubber. The preparation of polymers from CH₂:CHCO₂CH₂CH₂O₂CN-N+Me₃ was also described. Thus, bisphenol A [80-05-7] was treated with phosgene [75-44-5] to prepare the bis(chloroformate) which was treated with Me₂NNH₂ [57-14-7], quaternized with MeI [74-88-4], and treated with K₂CO₃ in EtOH to prepare and ammonioamidate I [56758-02-2].

IT 56757-97-2

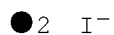
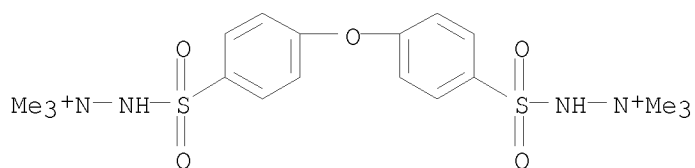
RL: USES (Uses)

(ammonioamidate manufacture from)

RN 56757-97-2 CAPLUS

CN Hydrazinium, 2,2'-[oxybis(4,1-phenylenesulfonyl)]bis[1,1,1-trimethyl-, diiodide (9CI) (CA INDEX NAME)

10/923,271



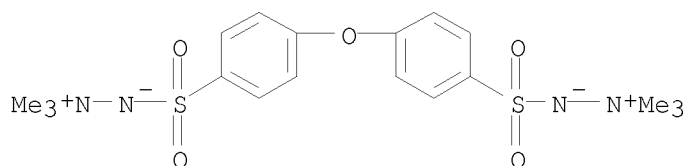
IT 56757-59-6P 56757-72-3P

RL: PREP (Preparation)

(preparation of)

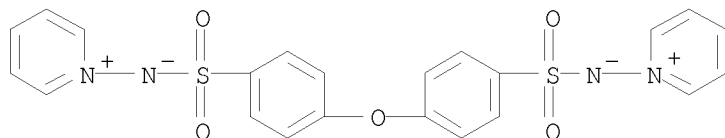
RN 56757-59-6 CAPLUS

CN Hydrazinium, 2,2'-[oxybis(4,1-phenylenesulfonyl)]bis[1,1,1-trimethyl-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 56757-72-3 CAPLUS

CN Pyridinium, 1,1'-[oxybis(4,1-phenylenesulfonylimino)]bis-, bis(inner salt) (9CI) (CA INDEX NAME)



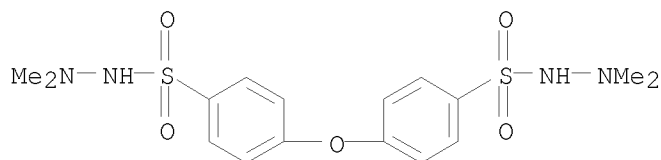
IT 56757-84-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(quaternization of)

RN 56757-84-7 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis(2,2-dimethylhydrazide) (9CI) (CA INDEX NAME)



10/923,271

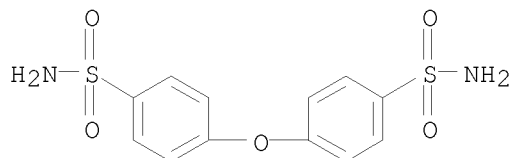
L13 ANSWER 69 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1974:3257 CAPLUS
DOCUMENT NUMBER: 80:3257
ORIGINAL REFERENCE NO.: 80:563a,566a
TITLE: p,p'-Oxybis(benzenesulfonamide) monohydrate
INVENTOR(S): Roth, Shirley H.
PATENT ASSIGNEE(S): Cities Service Co.
SOURCE: U.S., 1 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
US 3769343	A	19731030	US 1971-196228	19711105 <--
PRIORITY APPLN. INFO.:			US 1971-196228	19711105
AB	(p-H2NSO2C6H4)2O.H2O, useful as an intumescent agent, was prepared by reaction of the sulfonyl chloride with concentrated NH4OH at 70° for 30 min.			
IT	38356-87-5P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)			
RN	38356-87-5 CAPLUS			
CN	Benzenesulfonyl chloride, 4,4'-oxybis-, polymer with 4,4'-oxybis[benzenesulfonamide] (9CI) (CA INDEX NAME)			

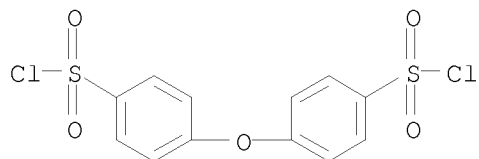
CM 1

CRN 7566-41-8
CMF C12 H12 N2 O5 S2



CM 2

CRN 121-63-1
CMF C12 H8 Cl2 O5 S2



L13 ANSWER 70 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:546499 CAPLUS

DOCUMENT NUMBER: 79:146499

ORIGINAL REFERENCE NO.: 79:23745a, 23748a

TITLE: Seven-membered tri- and tetracyclic benzothiophene derivatives

AUTHOR(S) : Neidlein, R.; Ziegler, M.

CORPORATE SOURCE: Pharm.-Chem. Inst., Univ. Karlsruhe, Karlsruhe, Fed. Rep. Ger.

SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1973), 306(7), 531-41

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE: Journal

LANGUAGE: German

GI For diagram(s), see printed CA Issue.

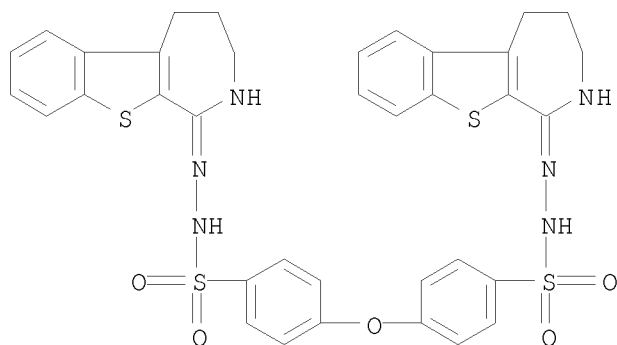
AB Reaction of the ketone I ($R = O$) with $HONH_2.HCl$ gave the oxime (I, $R = NOH$) as a mixture of anti-I and syn-I which was chromatog. separated. Reaction of syn-I ($R = NOH$) with $R_1R_2NCH_2CH(R_3)(CH_2)_nCl.HCl$ [$R_1 = R_2 = Me$ or Et or $R_1R_2 = (CH_2)_4$, $R_3 = H$ or Me , $n = 0$ or 1] yielded syn-I.HCl [$R = NO(CH_2)_nCH(R_3)CH_2NR_1R_2$]. Reaction of anti-I and syn-I ($R = NOH$) with 4-MeC₆H₄SO₂Cl gave anti-I and syn-I ($R = 4-MeC_6H_4SO_3N$), resp., which were rearranged into the lactam (II, $R = O$). Alkylation of II ($R = O$) with $Et_3O^+ BF_4^-$ and subsequent treatment with K_2CO_3 yielded the lactim ether (III, $Y = OEt$) (IV). Reaction of IV with $NCCH_2CN$ gave III [$Y = CH(CN)_2$] in tautomeric equilibrium with II [$R = C(CN)_2$]. IV reacted similarly with 3-methyl-1-phenyl-2-pyrazolin-5-one. Reaction of IV with RSO_2NHNH_2 ($R = Ph$, 4-MeC₆H₄, or 4-MeOC₆H₄) gave III ($Y = NHNHSO_2R$), reaction with $RCONHNH_2$ yielded the triazole derivs. (V, $R = pyridyl$, Ph , or Me).

IT 50491-76-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 50491-76-4 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[2-(4,5-dihydro-3H-[1]benzothieno[2,3-c]azepin-1-yl)hydrazide] (9CI) (CA INDEX NAME)

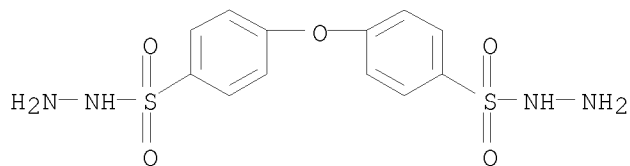


IT 80-51-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ethoxydihydrobenzothienoazepine)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 71 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1971:448620 CAPLUS

DOCUMENT NUMBER: 75:48620

ORIGINAL REFERENCE NO.: 75:7665a,7668a

TITLE: Aminobenzoic acid diuretics. 2. 4-Substituted-3-amino-5-sulfamoylbenzoic acid derivatives

AUTHOR(S): Feit, Peter W.

CORPORATE SOURCE: Leo Pharm. Prod., Ballerup, Den.

SOURCE: Journal of Medicinal Chemistry (1971), 14(5), 432-9

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 75:48620

GI For diagram(s), see printed CA Issue.

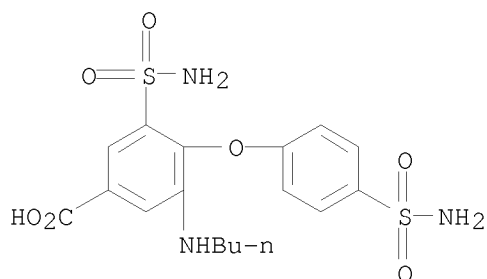
AB Of 42 N-alkylated 4-substituted-3-amino-5-sulfamoylbenzoic acids synthesized and tested as diuretics in dogs, 3-benzylamino-4-anilino-5-sulfamoylbenzoic acid (I), 3-n-butylamino-4-anilino-5-sulfamoylbenzoic acid (II), 3-benzylamino-4-phenylthio-5-sulfamoylbenzoic acid, 3-n-butylamino-4-phenylthio-5-sulfamoylbenzoic acid, 3-benzylamino-4-phenoxy-5-sulfamoylbenzoic acid (III), 3-(2-bromoallylamino)-4-phenoxy-5-sulfamoylbenzoic acid, 3-n-butylamino-4-phenoxy-5-sulfamoylbenzoic acid, 3-n-butylamino-4-phenoxy-5-sulfamoylbenzoic acid, 3-furfurylamino-4-phenoxy-5-sulfamoylbenzoic acid, and 3-benzylamino-4-(p-hydroxyphenoxy)-5-sulfamoylbenzoic acid were generally more effective than 3-benzylamino-4-chloro-5-sulfamoylbenzoic acid and 3-n-butylamino-4-chloro-5-sulfamoylbenzoic acid. Comparison with furosemide (4-chloro-N-(2-furylmethyl)-5-sulfamoylanthranilic acid) revealed that these new highly efficacious compds. possess a level of activity hitherto unknown for "high-ceiling" diuretics. Most of the sulfamoylbenzoic acids were prepared by alkylation of 4-chloro-3-nitro-5-sulfamoylbenzoic acid, followed by the reduction of the nitro acids to the corresponding amino acids, and subsequent reaction of these amino acids with various amines, phenols, thiophenols, mercaptans, and alcs.

IT 28395-07-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 28395-07-5 CAPLUS

CN Benzoic acid, 3-(aminosulfonyl)-4-[4-(aminosulfonyl)phenoxy]-5-(butylamino)- (CA INDEX NAME)



L13 ANSWER 72 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1969:58607 CAPLUS

DOCUMENT NUMBER: 70:58607

ORIGINAL REFERENCE NO.: 70:11035a,11038a

TITLE: Phosphorus-containing aromatic sulfonamide
fire-retardant blowing agents

INVENTOR(S): Herweh, John E.; Poshkus, Algirdas C.

PATENT ASSIGNEE(S): Armstrong Cork Co.

SOURCE: U.S., 3 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

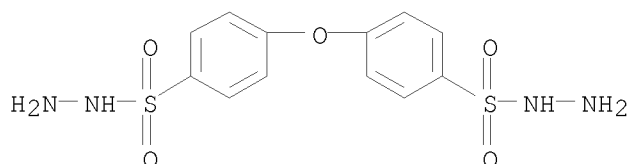
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3423485	A	19690121	US 1966-540486	19660406 <--

PRIORITY APPLN. INFO.: US 1966-540486 A 19660406

AB A pentavalent P ester is chlorosulfonated and treated with hydrazine (I) in a polar solvent to give a blowing agent which also acts as a fire retardant additive. Thus, 195.8 g. PO(OPh)₃ (Ia) was added over 20 min. to 2093 g. ClSO₂OH under a slight pos. N pressure at 22-4°. HCl was evolved and the solution heated 6 hrs. at 49-51°. The clear solution obtained was added dropwise to crushed ice at 0-5° to give a white precipitate CHCl₃ (2900 ml.) was added to the precipitate and the CHCl₃ solution washed, dried, diluted with hexane, cooled to 0° and filtered to give 265.3 g. chlorosulfonated Ia (II), m. 115-19°. I (2.48 g.) was added dropwise over 10 min. to 6.21 g. II in 100 ml. tetrahydrofuran at 4°. The mixture was warmed to room temperature in 45 min. and filtered to give 4.6 g. tris[p-(hydrazidosulfonyl)phenyl] phosphate (III), decomposed 155-7° (HCONMe₂, then H₂O). p-Hydroxyben-zenesulfonyl hydrazide, m. 144-7°, was recovered from the filtrate. III was heated at 136-59° to give 95-9% tris(p-hydroxybenzene -sulfenic acid) phosphate, N, and H₂O. Bis(p-chlorosulfonyl-phenyl) methylphosphonate, m. 84.5-7° was also prepared and treated with I to give bis[p-(hydrazidosulfonyl)phenyl] methylphosphonate, m. 132-4°. The blowing agents prepared were used to produce flexible foam sheet from a composition containing poly(vinyl chloride), dioctyl phthalate, epoxidized soybean oil, liquid Ca-Zn octanoate stabilizer, 50 mesh limestone, TiO₂, and Ca silicate.

10/923,271

IT 80-51-3
RL: USES (Uses)
(as blowing agent, for chloroethylene polymers)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

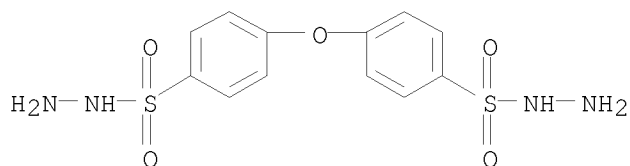


L13 ANSWER 73 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:29834 CAPLUS
DOCUMENT NUMBER: 70:29834
ORIGINAL REFERENCE NO.: 70:5603a,5606a
TITLE: Cellular polyolefin compositions
INVENTOR(S): Allen, Geoffrey; Sharma, Vijay R.
PATENT ASSIGNEE(S): Imperial Chemical Industries Ltd.
SOURCE: Brit., 2 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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GB 1134403		19681120	GB 1965-23479	19650602 <--

GI For diagram(s), see printed CA Issue.
AB Title composition are given improved mold release properties by dry blending equal amts. (0.5-1.5 weight %) of Zn stearate (I) and dilauryl thiodipropionate (II) with the olefin powder. E.g., 100 parts low-d. polyethylene powder, containing 1 weight % 4,4'-oxydi-benzenesulfonic acid dihydrazide (IIa) blowing agent and 0.25 part butylated p-hydroxytoluene antioxidant, was blended with 0.5 weight % I and 0.5 weight % II and rotationally molded (10 multiaxial rpm.) in a mild steel mold for 15 min. in 260° air. The cooled cellular polyethylene article was easily removed from the mold. The same blend without either I or II was extremely difficult to demold. Use of thiodibutyric acid esters instead of II was claimed.

IT 80-51-3
RL: USES (Uses)
(as blowing agent for ethylene polymer foam)
RN 80-51-3 CAPLUS
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)

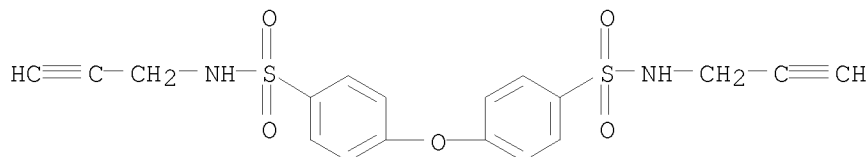


L13 ANSWER 74 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1967:10753 CAPLUS
 DOCUMENT NUMBER: 66:10753
 ORIGINAL REFERENCE NO.: 66:2059a,2062a
 TITLE: N-Alkynylarenesulfonamides and -sulfonimides
 INVENTOR(S): Block, Dale G.; Bailey, Raymond E.; Towle, Jack L.
 PATENT ASSIGNEE(S): Harshaw Chemical Co.
 SOURCE: Fr., 5 pp.
 CODEN: FRXXAK
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1438772		19660513	FR 1965-21825	19650622 <--
DE 1543003			DE	
GB 1051084			GB	
US 3400152		19680903	US 1964-378048	19640625 <--
PRIORITY APPLN. INFO.:			US	19640625

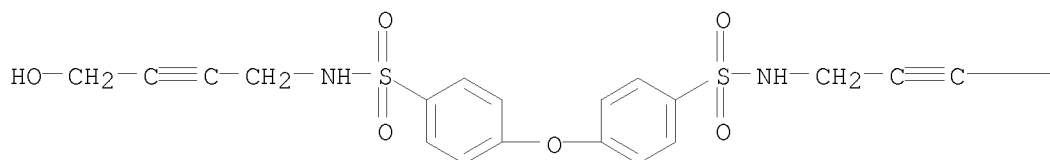
AB The title compds. of general formula $\text{PhSO}_2\text{NRA}[\text{RNSO}_2\text{Ph}]_0-1$ are plasticizers for synthetic resins for the production of transparent sheets. Thus, to 19.7 g. PhSO_2NHNa in 100 ml. HCONMe_2 was added by stirring 10.5 g. 1-chloro-4-hydroxy-2-butyne, the mixture heated to 100° during 2 hrs. (the solution turns to dark-brown), concentrated in vacuo to remove solvent, poured into iced H_2O , filtered, washed with cold H_2O , and air-dried to give $\text{PhSO}_2\text{NHCH}_2\text{C.tplbond.CCH}_2\text{OH}$, orange, m. $73-4^\circ$ (MeOH). Similarly were prepared (formula, and m.p. given): $\text{PhSO}_2\text{NHCH}_2\text{C.tplbond.CCH}_2\text{NHSO}_2\text{Ph}$ (from 1,4-dichloro-2-butyne), $135-7^\circ$ (aqueous MeOH); $\text{PhSO}_2\text{NHCH}_2\text{C.tplbond.CH}$, $87-9^\circ$ (EtOH); $p\text{-CH.tplbond.CCH}_2\text{NHSO}_2\text{C}_6\text{H}_4\text{OC}_6\text{H}_4\text{SO}_2\text{NHCH}_2\text{C.tplbond.CH-p}$, $184-7^\circ$ (aqueous MeOH); $\text{PhSO}_2\text{N}(\text{CH}_2\text{C.tplbond.CH})\text{SO}_2\text{Ph}$, $87-8^\circ$.
 IT 13630-89-2P 13630-95-0P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 13630-89-2 CAPLUS
 CN Benzenesulfonamide, 4,4'-oxybis[N-2-propynyl- (8CI) (CA INDEX NAME)



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RN 13630-95-0 CAPLUS
CN Benzenesulfonamide, 4,4'-oxybis[N-(4-hydroxy-2-butynyl)- (8CI) (CA INDEX NAME)

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—CH2—OH

L13 ANSWER 75 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:73603 CAPLUS
DOCUMENT NUMBER: 64:73603
ORIGINAL REFERENCE NO.: 64:13766e-f
TITLE: Electrodeposition of nickel
PATENT ASSIGNEE(S): Harshaw Chemical Co.
SOURCE: 30 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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NL 6505823		19651109	NL 1965-5823	19650507 <--
FR 1436924			FR	
PRIORITY APPLN. INFO.:			US	19640508

AB Addition of unsatd., especially acetylenic, brighteners to an acid Ni electrodeposition bath results in a brighter coating. However, due to an excessive adsorption of the brightener, parts of the surface of the basis metal, where a relatively low c.d. prevails, may remain uncovered. Electrodeposition baths, containing a Ni salt and a brightener are improved by addition of a water-soluble unsatd. carboxylic acid or its ester or amide.

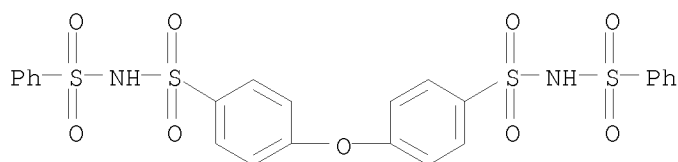
From a bath, containing NiSO4.6H2O 300, NiCl2.6H2O 45, H3BO3 41.25, a wetting agent 0.2, p,p'-oxybis(dibenzenesulfonimide) 2.5, and propargyl alc. (I) 0.01 g./l. at 60° with a c.d. of 430 amp./m.2 a semibright coating with uncovered parts in the recesses was obtained. An addnl. amount of 0.02 g./l. I, together with 0.01 g./l. of 4-methyl-2-pent-4-enoic acid caused the deposit to be even and bright.

IT 7218-44-2, Dibenzenesulfonamide, 4,4''-oxybis-
(nickel electrodeposition from baths containing)
RN 7218-44-2 CAPLUS

TOh

18/07/2008

CN Benzenesulfonamide, 4,4'-oxybis[N-(phenylsulfonyl)- (CA INDEX NAME)



L13 ANSWER 76 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:20288 CAPLUS

DOCUMENT NUMBER: 64:20288

ORIGINAL REFERENCE NO.: 64:3792c-f

TITLE: Polyethylene foam

INVENTOR(S): Ingram, Alvin R.

PATENT ASSIGNEE(S): Koppers Co., Inc.

SOURCE: 3 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3222304		19651207	US 1962-238031	19600201 <--

PRIORITY APPLN. INFO.: US 19600201

AB Polyethylene foam with a d. of ≥ 10 lb./ft.³ is produced by thoroughly mixing 100 parts polyethylene with 1-5 parts N-releasing agent and 0.1-4 parts blowing agent adjunct, such as glyceryl monostearate, propylene glycol monostearate, ethylene glycol monostearate, and poly(dimethyl-siloxane), at a temperature below the N-releasing temperature of the releasing agent, and then molding the mixture by compression molding or rotational molding at a temperature higher than the N-releasing temperature of the releasing agent, and maintaining the temperature for a time sufficient to cause expansion of the cells to 5-20 mils. The N-releasing agent must have a decomposition temperature above the crystal m.p. of polyethylene and must not cause appreciable cross-linking of polyethylene. For example, 25 lb. polyethylene pellets was kneaded in a Bolling mixer under a ram pressure of 34 psig. After 2 min. the temperature reached 240°F. The ram was raised, 1 lb. azodicarbonamide added, and mixing continued for 1 min. Then 1/2 lb. glyceryl monostearate was added and a ram pressure of 34 psig. again applied until a temperature of 300°F. was reached. The charge was removed from the mixer, extruded at 280°F., and chopped into cylindrical pellets of 1/16, in. length and 1/8 in. diameter. A 1.3 g. sample of these pellets was put in a door-stop bumper mold, which is a roudbottom cylinder of 1/2 in. diameter and 1 in. length, with lip radially grooved to permit venting. The mold was tightly closed and heated gradually for 18 min. to 370-80°F., which was maintained for 5 min., and gradually cooled to 100°F. over an 8 min. period. The foamed product could easily be removed from the mold without any

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distortion. It had a d. of 13.5 lb./ft.³ and the interior was composed of uniformly distributed cells of 5-15 mil diameter

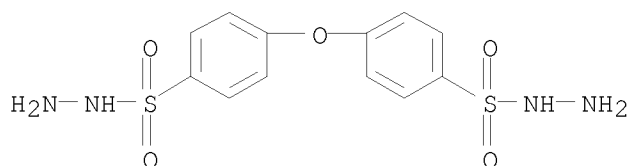
IT 80-51-3P, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide

RL: PREP (Preparation)

(preparation of)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 77 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1966:12160 CAPLUS

DOCUMENT NUMBER: 64:12160

ORIGINAL REFERENCE NO.: 64:2251b-c

TITLE: Molded plastic foams

PATENT ASSIGNEE(S): National Distillers and Chemical Corp.

SOURCE: 11 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
GB 1007988		19651022	GB 1962-34080	19620905 <--
PRIORITY APPLN. INFO.:			US	19610913

AB A molded plastic foam is manufactured by placing a free flowing, foamable, powdered polymer having a particle size <2000 μ and 0.1-10% by weight of solid blowing agent in a mold and heating to a temperature that will decompose the

blowing agent and melt but not decompose the polymer.

IT 80-51-3P, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide

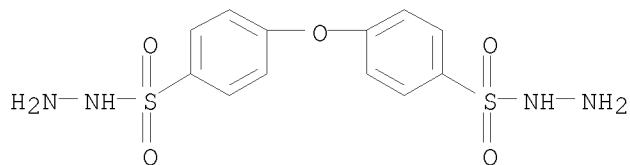
10195-67-2P, Semicarbazide, [oxybis(p-phenylenesulfonyl)]di-

RL: PREP (Preparation)

(as blowing agent in plastic-foam manufacture)

RN 80-51-3 CAPLUS

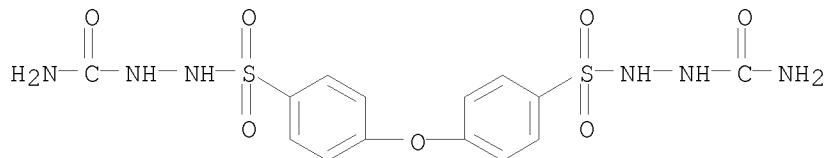
CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



RN 10195-67-2 CAPLUS

10/923,271

CN Benzenesulfonic acid, 4,4'-oxybis-, bis[2-(aminocarbonyl)hydrazide] (9CI)
(CA INDEX NAME)



L13 ANSWER 78 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1964:493194 CAPLUS
DOCUMENT NUMBER: 61:93194
ORIGINAL REFERENCE NO.: 61:16267a-c
TITLE: Polyketones
PATENT ASSIGNEE(S): VEB Farbenfabrik Wolfen
SOURCE: 4 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 284482		19640310	NL	19621018 <--
FR 1365285			FR	

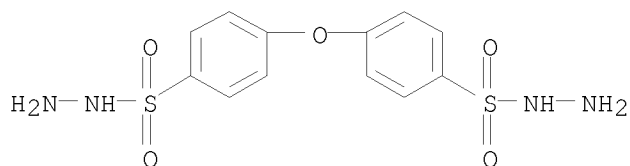
AB Polymers having improved phys. and tech. properties can be obtained by reaction of mono-, di-, or trimethylolketones or their mixts. in the presence of a catalyst consisting of 40-60 weight % aqueous solution of NaOH or KOH

or alcoholates or alc. solns. of these bases. From 0.5 to 5.0 volume % catalyst can be used. Suitable fillers, plasticizers, surfactants, and blowing agents can be added to the polymerizing mixture. A polymer foam can be obtained by reaction of the monomer-catalyst mixture in an open or closed mold. The polymers obtained are insol. in organic solvents, acids, and bases and are only attacked by concentrated H2SO4 and HNO3. Hard foams useful as building elements and as insulating material can be prepared from them. Thus, 100 parts by weight hydroxymethylated acetone compound containing 1.7 methylol groups was mixed together with 3.5 parts by volume 50% NaOH. The mixture was brought into a closed, iron cylinder (2.5 times the volume of the mixture) provided with a discharge opening for the H2O vapor. The filled mold was heated at 90° during 2 min. The polymer obtained had a d. of 0.4 and a compression strength of .apprx.70 kg./cm.2

IT 80-51-3, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide
(reaction products with polyethylene)

RN 80-51-3 CAPLUS

CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 79 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1964:471718 CAPLUS

DOCUMENT NUMBER: 61:71718

ORIGINAL REFERENCE NO.: 61:12496g-h

TITLE: Sulfonamidopyrimidines, a new group of blood-sugar reducing compounds

AUTHOR(S): Gutsche, K.; Harwart, A.; Horstmann, H.; Priewe, H.; Raspe, G.; Schraufstaetter, E.; Wirtz, S.; Woerffel, U.

CORPORATE SOURCE: Farbenfabriken Bayer A.-G., Wuppertal-Elberfeld, Germany

SOURCE: Arzneimittel-Forschung (1964), 14, 373-6

CODEN: ARZNAD; ISSN: 0004-4172

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Among the 100 new sulfonamidopyrimidines described (preparation methods described) the optimum effect was found with the 2-benzenesulfonamido-5-alkoxypyrimidines, of which the 5-(α -methoxyethoxy) derivative (Glycodiazine) was the most valuable. Dogs were used. 17 references.

IT 96070-72-3P, Benzenesulfonamide, 4,4'-oxybis[N-[5-(2-methoxyethoxy)-2-pyrimidinyl]-

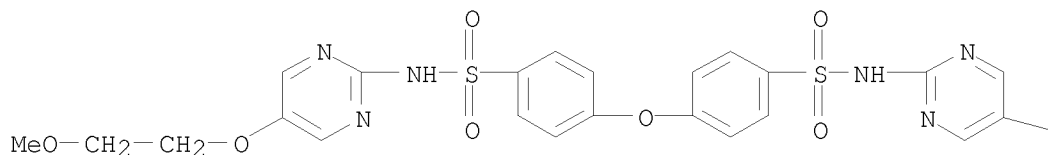
RL: PREP (Preparation)

(preparation of)

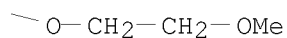
RN 96070-72-3 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis[N-[5-(2-methoxyethoxy)-2-pyrimidinyl]-
(CA INDEX NAME)

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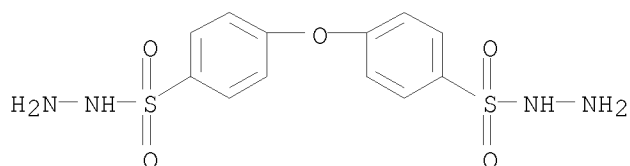
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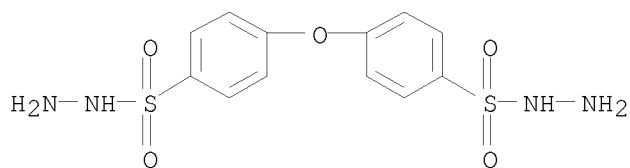
L13 ANSWER 80 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:75056 CAPLUS
DOCUMENT NUMBER: 52:75056
ORIGINAL REFERENCE NO.: 52:13316b-d
TITLE: Foamed epoxy resins
INVENTOR(S): Aase, Arnold S.; Bolstad, Luther L.
PATENT ASSIGNEE(S): Minneapolis-Honeywell Regulator Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	US 2831820		19580422	US 1953-348558	19530413 <--
GI	For diagram(s), see printed CA Issue.				
AB	A stable epoxy resin foam is prepared by heating a mixture of epoxy resin 71.25 of the formula $O.CH_2.CH.CH_2[OROCH_2CH(OH)CH_2]_xOROCH_2CH.CH_2.O$, in which R is a phenylene radical and x is 0.3-20 and which are prepared from epichlorohydrin and 2,2-bis(4-hydroxyphenyl)propane, (4-H ₂ NC ₆ H ₄) ₂ CH ₂ (I) 17, p,p'-oxybis-(benzenesulfonyl hydrazide) (II) 0.8, naphtha 10.9, and polyoxyglycol 0.05 part at 225-50°F. The d. of the foam is 5 lb./cu. ft., and the compressive strength is greater than 100 lb./sq. in. The use of polyethylenepolyamines instead of I is also described and claimed. The use of diazoaminobenzene, (NH ₄) ₂ CO ₃ , NH ₄ O ₂ CNH ₂ , or dinitrosopentamethylenetetramine instead of II is also claimed.				
IT	80-51-3, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide (as blowing agent for epoxy resins)				
RN	80-51-3 CAPLUS				
CN	Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)				



L13 ANSWER 81 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1956:51079 CAPLUS
DOCUMENT NUMBER: 50:51079
ORIGINAL REFERENCE NO.: 50:9787f-h
TITLE: Foam-forming compositions containing glycidyl polyethers of dihydric phenols
INVENTOR(S): Parry, Harvey L.; Blackburn, Billee O.
PATENT ASSIGNEE(S): Shell Development Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

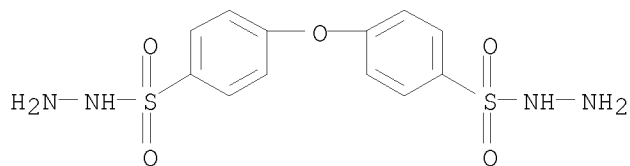
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 2739134		19560320	US 1951-243585	19510824 <--
AB	Resinous foams of high strength are prepared by blending glycidyl polyethers of dihydric phenols having 1,2-epoxy equivalencies of 1.0-2.0 with 0.2-30.0% of a blowing agent, e.g. (NH ₄) ₂ CO ₃ , NH ₄ HCO ₃ , NaHCO ₃ , KHCO ₃ , diazoaminotoluene, diazoaminobenzene, 1,3-bis(p-xenyl)triazine, 1,3-bis(p-xenyl)triazine, p,p'-oxybis(benzenesulfonyl hydrazide), azodiisobutyronitrile, dinitrosopentamethylenetetramine, biphenyl-4,4'-di(sulfonyl azide), furoyl azide, or cinnamoyl azide. The mixture is brought to a temperature below the decomposition point of I and an amine curing agent is added. Foaming occurs during the exothermic reaction. The process is useful in the manufacture of radomes for aircraft. Preferred polyethers are prepared from 2,2-bis(4-hydroxyphenyl)propane.				
IT	80-51-3, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide (as blowing agent in glycidyl polyethers of dihydric phenols)				
RN	80-51-3 CAPLUS				
CN	Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)				



L13 ANSWER 82 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1955:49315 CAPLUS
 DOCUMENT NUMBER: 49:49315
 ORIGINAL REFERENCE NO.: 49:9538h-i,9539a-c
 TITLE: Derivatives of chloro-2,4-benzenedisulfonic acid
 AUTHOR(S): Kulka, Marshall
 CORPORATE SOURCE: Dominion Rubber Co., Guelph, Can.
 SOURCE: Canadian Journal of Chemistry (1954), 32, 598-605
 CODEN: CJCHAG; ISSN: 0008-4042
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 49:49315
 AB Reaction products of p-ClC₆H₄SO₂Cl (I), 1,2,4-ClC₆H₃(SO₂Cl)₂ (II), and (4-ClSO₂C₆H₄)₂O (III) were prepared for testing as insecticides (m.p. and % yield are given for each compound). II with the appropriate alc. or phenol and NaOH yielded 1,2,4-ClC₆H₃(SO₃R)₂ (R given): Me, 118-19°, 55; Et, 72-3°, 30; ClCH₂CH₂, 72-3°, 75; p-ClC₆H₄, 141-2°, 92; p-O₂NC₆H₄, 147-8°, 75; 8-quinolyl, 174-5°, 82. Similarly, I gave the 8-quinolyl, 120-1°, 70, and o-MeOC₆H₄ ester, 99-100°, 70, and III gave the di-(ClCH₂CH₂), 82-3°, 75, and di(p-ClC₆H₄) ester, 104-5°, 80. II and III in C₆H₆, stirred 5 hrs. at 50-60° with Na₂SO₃, gave 1,2,4-ClC₆H₃(SO₂H)₂ (IV) and (p-HO₂SC₆H₄)₂O (V), resp. IV with CH₂ClCO₂H and with CHCl₂CO₂H gave the disulfones 1,2,4-ClC₆H₃(SO₂R)₂ (R given): Me, 174-5°, 70; and ClCH₂, 137-8°, 25. Similarly, V gave the disulfones (p-RSO₂C₆H₄)₂O

(R given): Me, 182-3°, 75, and ClCH₂, 139-40°, 50.
 p-ClC₆H₄SO₂H (VI) and V with 40% aqueous HCHO gave p-ClC₆H₄SO₂CH₂OH, 111-12°, 90, and (p-HOCH₂SO₂C₆H₄)₂O, 151-3°, 90. VI with (p-ClC₆H₄)₂CHOH gave p-[(p-ClC₆H₄)₂CHSO₂]C₆H₄Cl, 105-6°, 53. I, heated with veratrole and ZnCl₂ at 120-30°, the product acidified, extracted with C₆H₆, the extract concentrated, and the residue fractionally distilled,
 gave o-(p-ClC₆H₄SO₃)C₆H₄OMe, 99-100° (b_{0.2} 170-80°), 28, and 1,3,4-(p-ClC₆H₄SO₂)C₆H₃(OMe)₂, 140-1° (b_{0.2} 180-200°), 7. With anisole, I gave p-(p-ClC₆H₄SO₂)C₆H₄OMe, 70-1°, 15. Chlorination of 1,2,4-ClC₆H₃(SO₂NH₂)₂ at 25-30° gave the 1,N,N,N',N'-penta-Cl compound, 148-9°, 64 (explosive when heated in p-xylene). II heated with the appropriate amine, gave the following 2,4-disulfonamides: N,N,N',N'-tetra-Me, 132-3°, 60; N,N'-di-2-pyridyl, 280° (decomposition), 80; N,N'-bis(2-hydroxyethyl), 127-8°, 35; and 1-chloro-2,4-bis(1,2,3,4-tetrahydro-1-quinolinesulfonyl)benzene, 116-17°, 54. Similarly, I gave N-2-pyridyl-p-chlorobenzenesulfonamide, 193-4°, 80, and 1-(p-chlorobenzenesulfonyl)-1,2,3,4-tetrahydroquinoline, 94-5°, 60. I and II, stirred 2 hrs. at 10° with aqueous solns. of N₂H₄ gave dihydrazides, 117-18° (decomposition), 92, and 133° (decomposition), 80. Higher temperature or longer reaction time leads to the formation of the sulfinic acid.

IT 80-51-3, Benzenesulfonic acid, 4,4'-oxydi-, dihydrazide (esters)
 RN 80-51-3 CAPLUS
 CN Benzenesulfonic acid, 4,4'-oxybis-, 1,1'-dihydrazide (CA INDEX NAME)



L13 ANSWER 83 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1951:32610 CAPLUS

DOCUMENT NUMBER: 45:32610

ORIGINAL REFERENCE NO.: 45:5650g-i

TITLE: Synthesis of 3,4-dihydroxysulfapyridine

AUTHOR(S): Belonosov, I. S.

CORPORATE SOURCE: Khabarovsk Med. Inst.

SOURCE: Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation) (1949), 22, 1103-7

CODEN: ZPKHAB; ISSN: 0044-4618

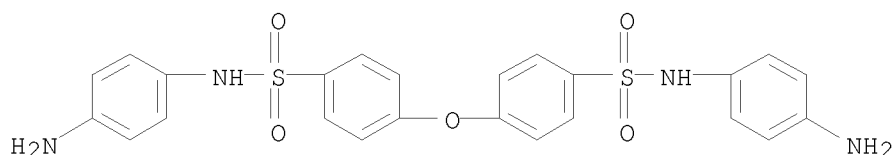
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Meconic acid (180 g.), purified through the NH₄ salt by precipitation, boiled 3 hrs. with 1.8 l. HCl (d. 1.13) gave comenic acid, purifiable as the NH₄ salt. This (50 g.) in 500 g. 25% NH₄OH refluxed 4-5 hrs. and heated in an open vessel until the NH₃ had been driven off, gave after solution in hot H₂O and acidification with HCl (Congo red) 52% 3-hydroxy-4(H)-picolinic acid (I), purified by charcoal treatment; this (20 g.)

heated above m.p. until CO₂ evolution stopped gave 64% 3,4-dihydroxypyridine, m. 250° (from EtOH). This (21 g.) heated 12 hrs. with 1 volume xylene and 8 g. NaNH₂, best at 145-50°, gave 40% 2-amino-3,4-dihydroxypyridine, m. 295° (from EtOH). This (8 g.) heated with 5 g. NaOH and 14.8 g. p-AcNHC₆H₄SO₂Cl to 125°, then 1 hr. at 58° with 200 ml. 20% HCl, and neutralized with Na₂CO₃, gave 68% 3,4-dihydroxysulfapyridine, m. 212° (from EtOH). The Et ester of I could not be obtained by following Reibstein's procedure [J. prakt. Chemical [2], 24, 283(1881)].

IT 95576-83-3P, Benzenesulfonanilide, 4,4''-oxybis[4'-amino-
RL: PREP (Preparation)
(preparation of)
RN 95576-83-3 CAPLUS
CN Benzenesulfonamide, 4,4'-oxybis[N-(4-aminophenyl)- (CA INDEX NAME)

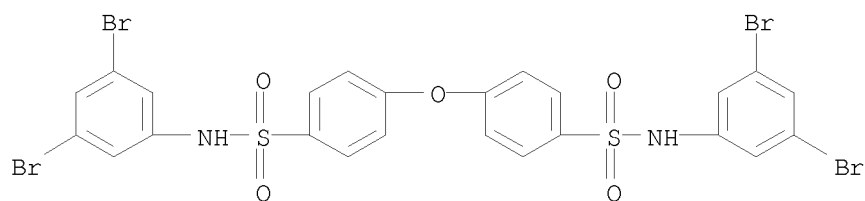


L13 ANSWER 84 OF 84 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1950:30032 CAPLUS
DOCUMENT NUMBER: 44:30032
ORIGINAL REFERENCE NO.: 44:5835f-h
TITLE: Syntheses of sulfanilamide derivatives containing diphenyl ether. III
AUTHOR(S): Tani, Chiaki; Kondo, Takuma
SOURCE: Yakugaku Zasshi (1950), 70, 128-30
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Diphenyl ether derivs. are less toxic to higher animals but have germicidal properties. Derivs. are prepared for antimalarials. Condensation of (p-ClO₂SC₆H₄)₂O (I) and 3,5-Br₂C₆H₃NH₂ (II) gives 4,4'-bis(3,5-dibromophenylsulfamyl)diphenyl ether, prisms, m. 207-9°. I and 6-methoxy-8-amino-quinoline give 4,4'-bis(6-methoxy-8-quinolylsulfamyl)-diphenyl ether, prisms, m. 199.5-200°. 4-PhOC₆H₄NH₂ and 3,5-Br₂C₆H₃SO₂Cl (III) give 4-(3,5-dibromophenylsulfonamido)diphenyl ether, needles, m. 129-30° 4-amino-4'-bromodiphenyl ether and III give 4-(3,5-dibromophenylsulfonamido)-4'-bromodiphenyl ether, plates, m. 147-8°.

IT 854016-91-4P, Benzenesulfonanilide, 4,4''-oxybis[3',5'-dibromo-
858501-63-0P, Benzenesulfonamide, 4,4'-oxybis[N-(6-methoxy-8-
quinolyl)-
RL: PREP (Preparation)
(preparation of)
RN 854016-91-4 CAPLUS
CN Benzenesulfonanilide, 4,4''-oxybis[3',5'-dibromo- (5CI) (CA INDEX NAME)

10/923,271



RN 858501-63-0 CAPLUS

CN Benzenesulfonamide, 4,4'-oxybis[N-(6-methoxy-8-quinolyl)- (5CI) (CA INDEX NAME)

